FIG. 1
(PRIOR ART)

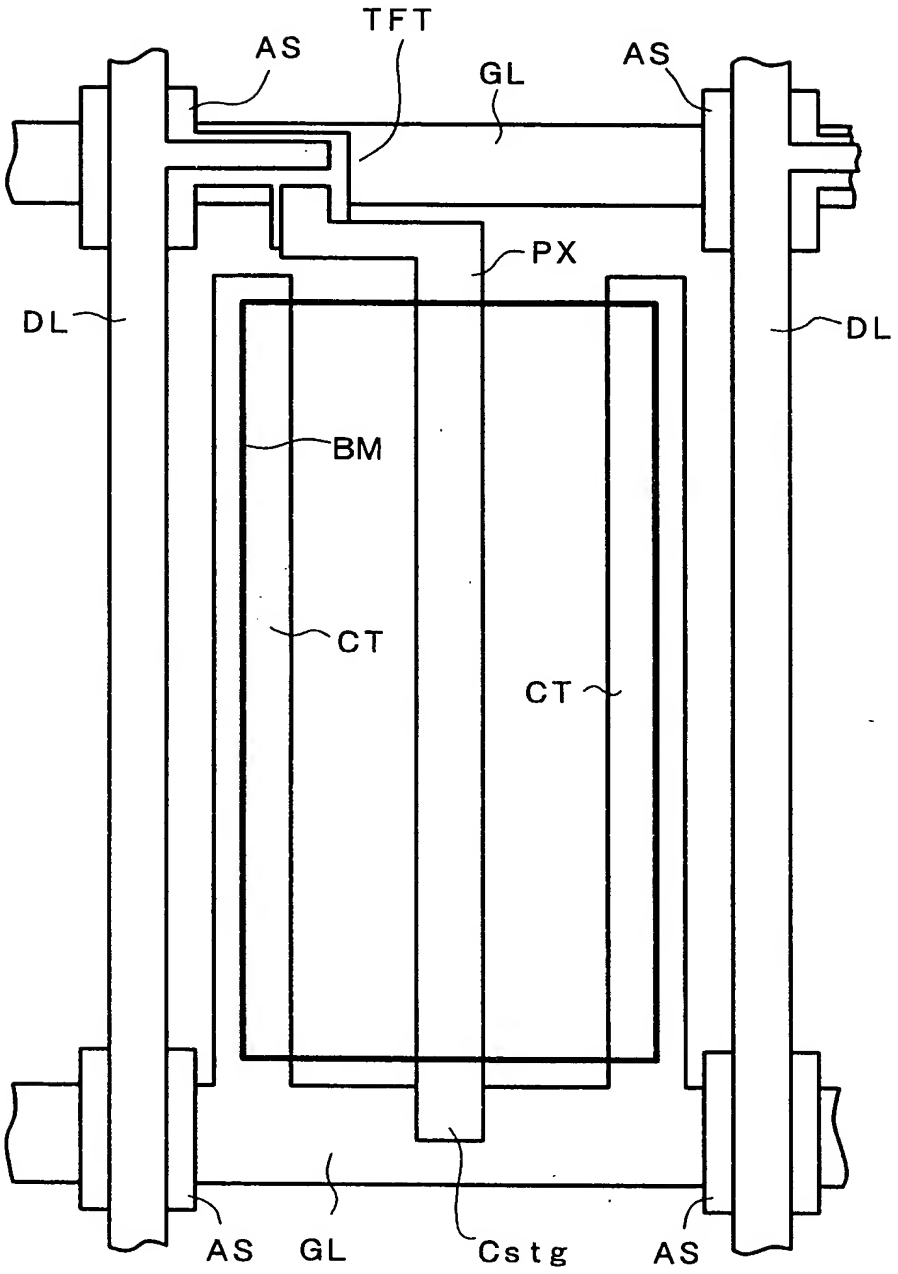


FIG. 2 (A) FIG. 2 (B) FIG. 2 (C)

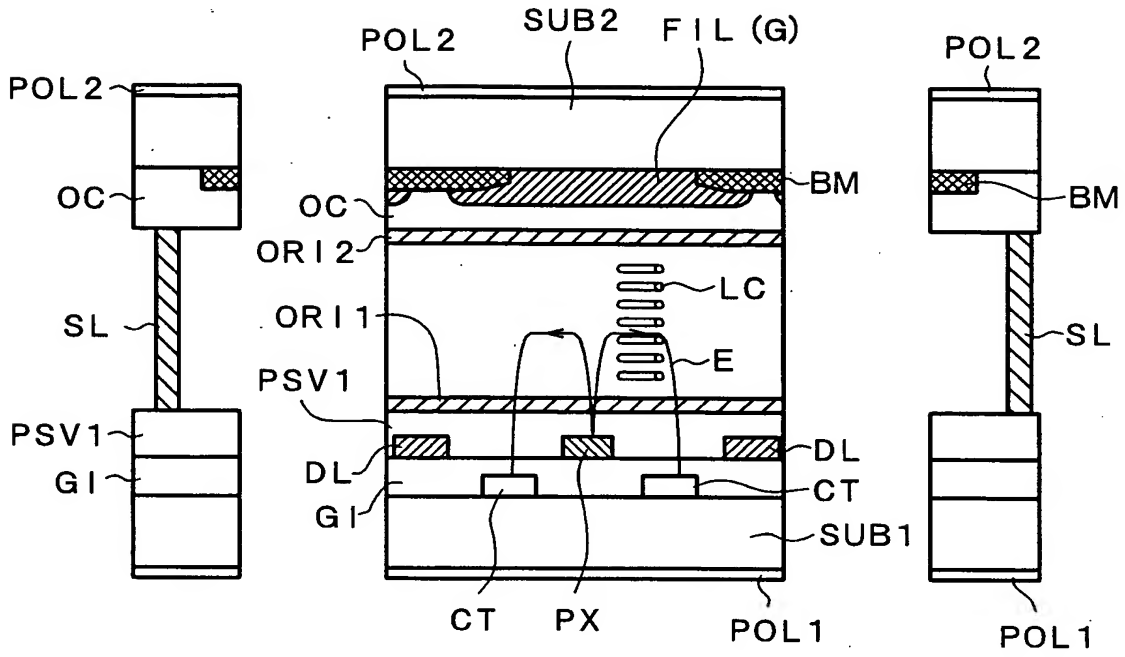


FIG. 3

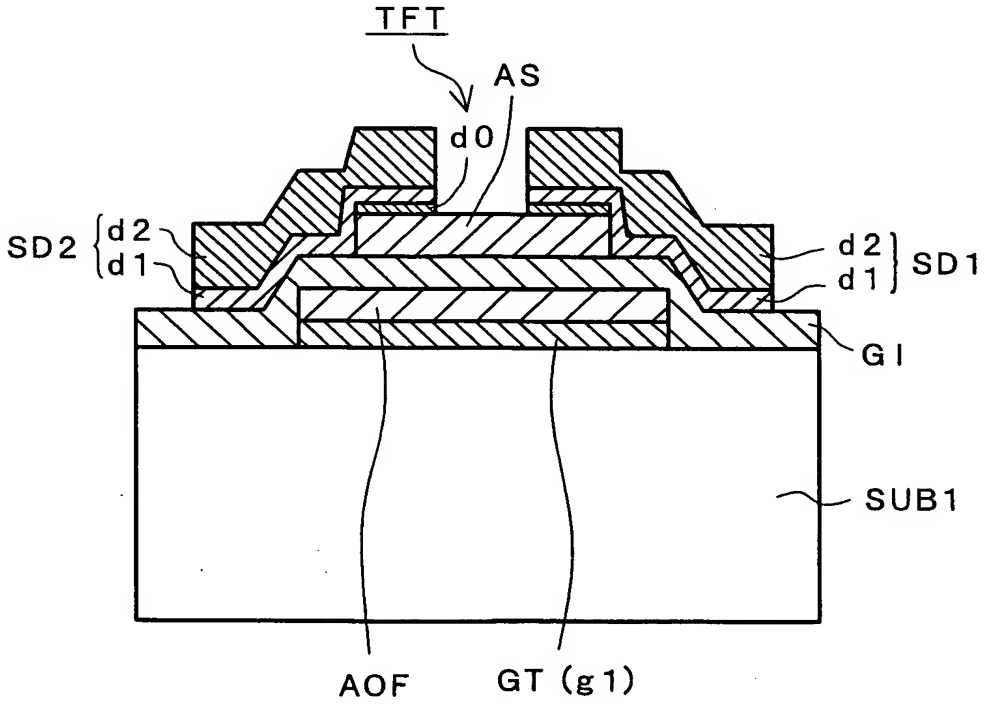


FIG. 4

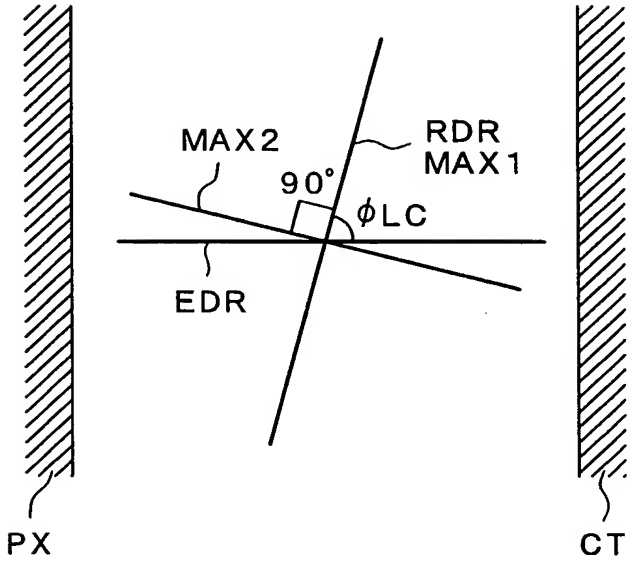


FIG. 5

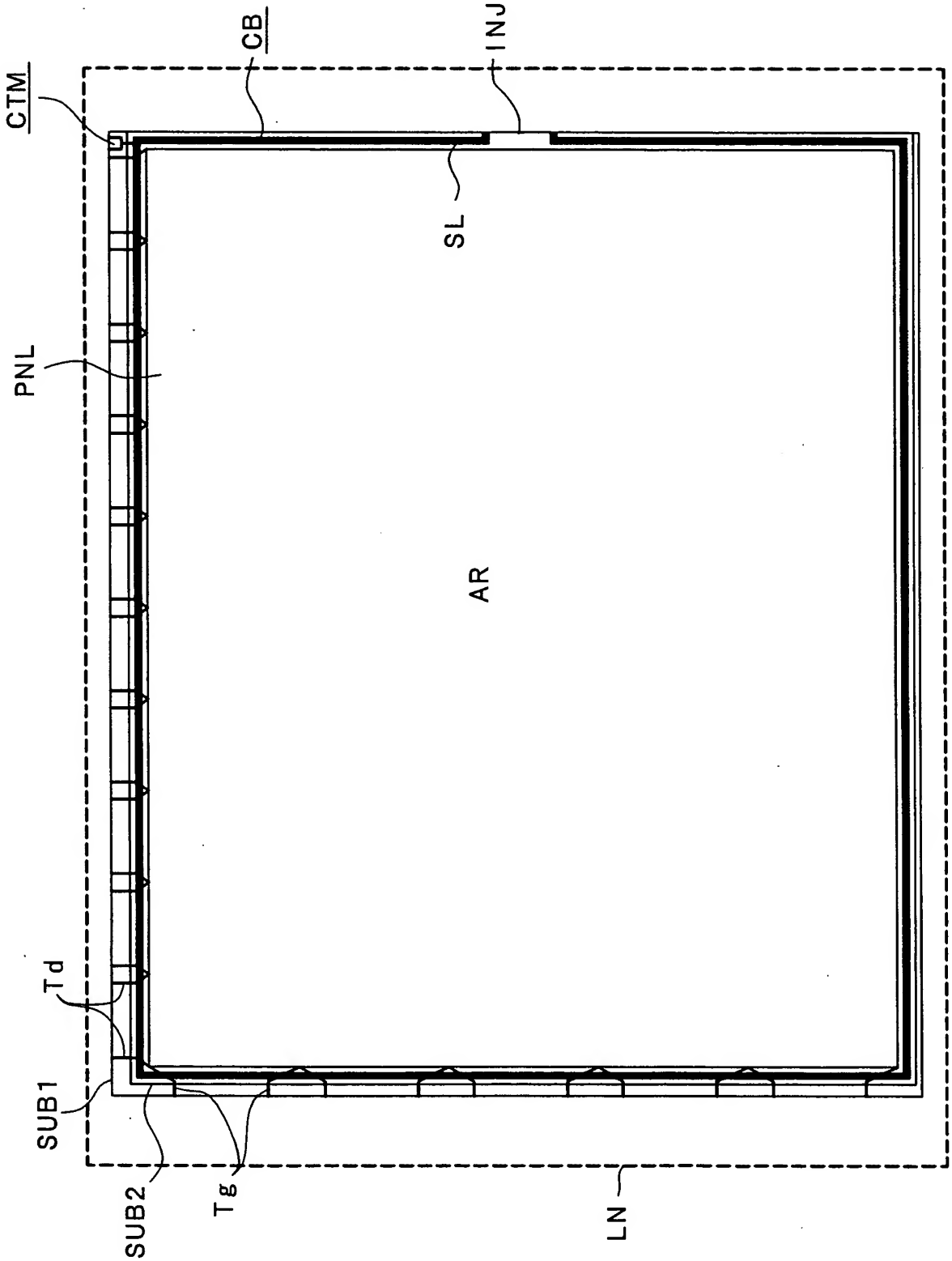


FIG. 6

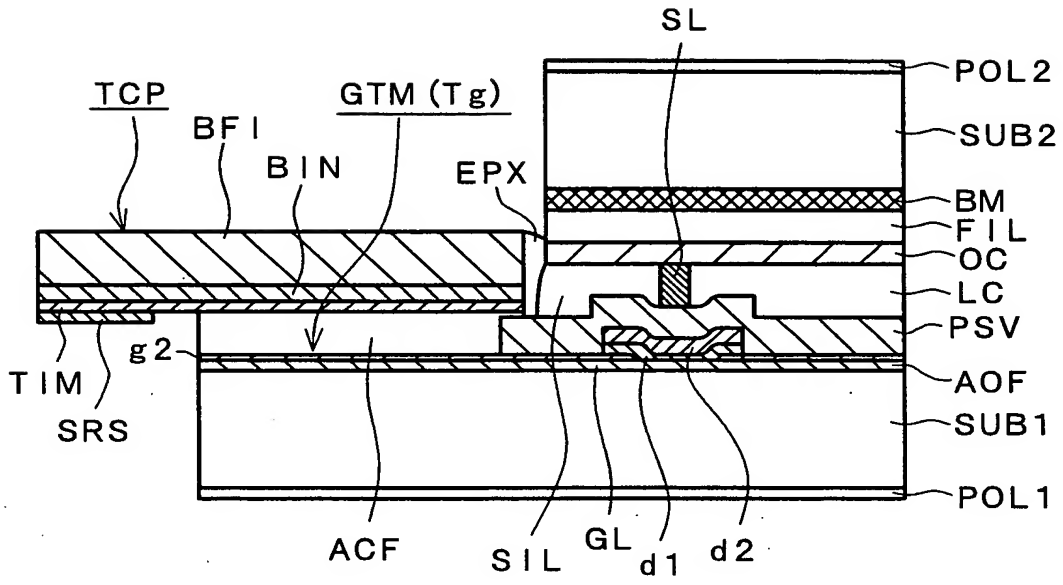

SL
POL2
TCP
GTM (Tg)
BF I
SUB2
BIN
EPX
BM
FIL
OC
LC
PSV
g2
AOF
TIM
SRS
SUB1
POL1
ACF
SIL
GL
d1
d2

FIG. 7

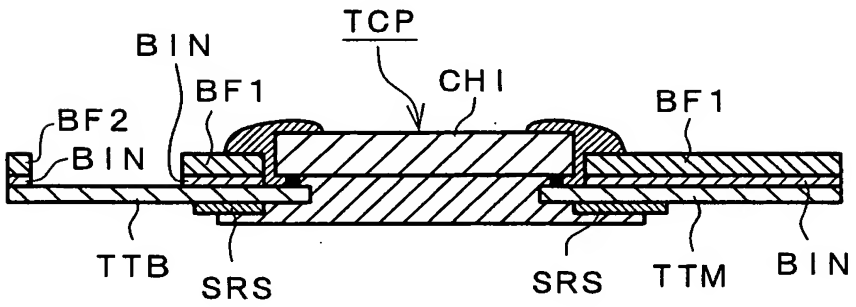
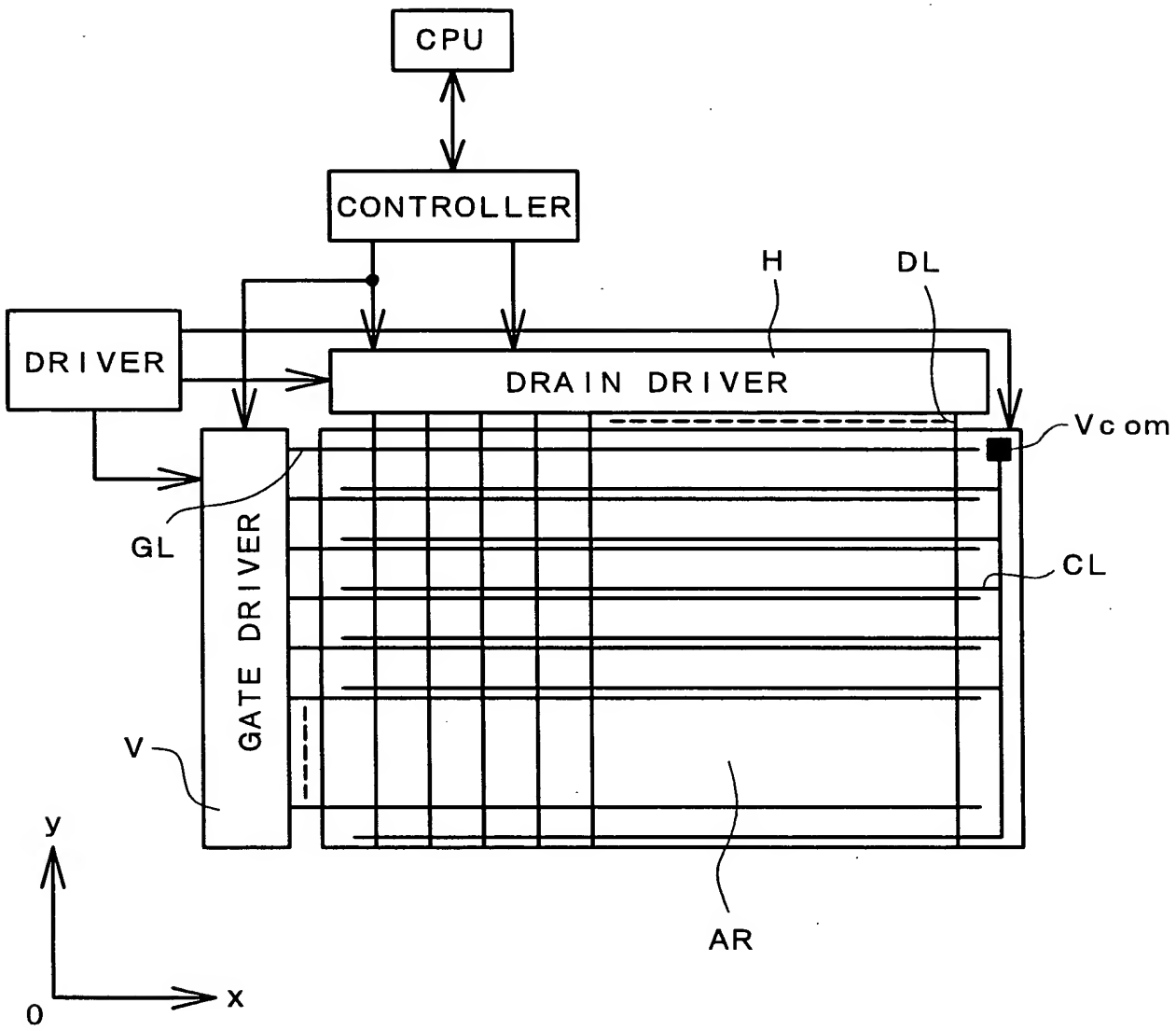

TCP
BIN
BF1
CHI
BF1
BF2
BIN
TTB
SRS
SRS
TTM
BIN

FIG. 8


CPU
CONTROLLER
H
DL
DRIVER
DRAIN DRIVER
Vcom
GL
GATE DRIVER
CL
V
y
AR
0
x

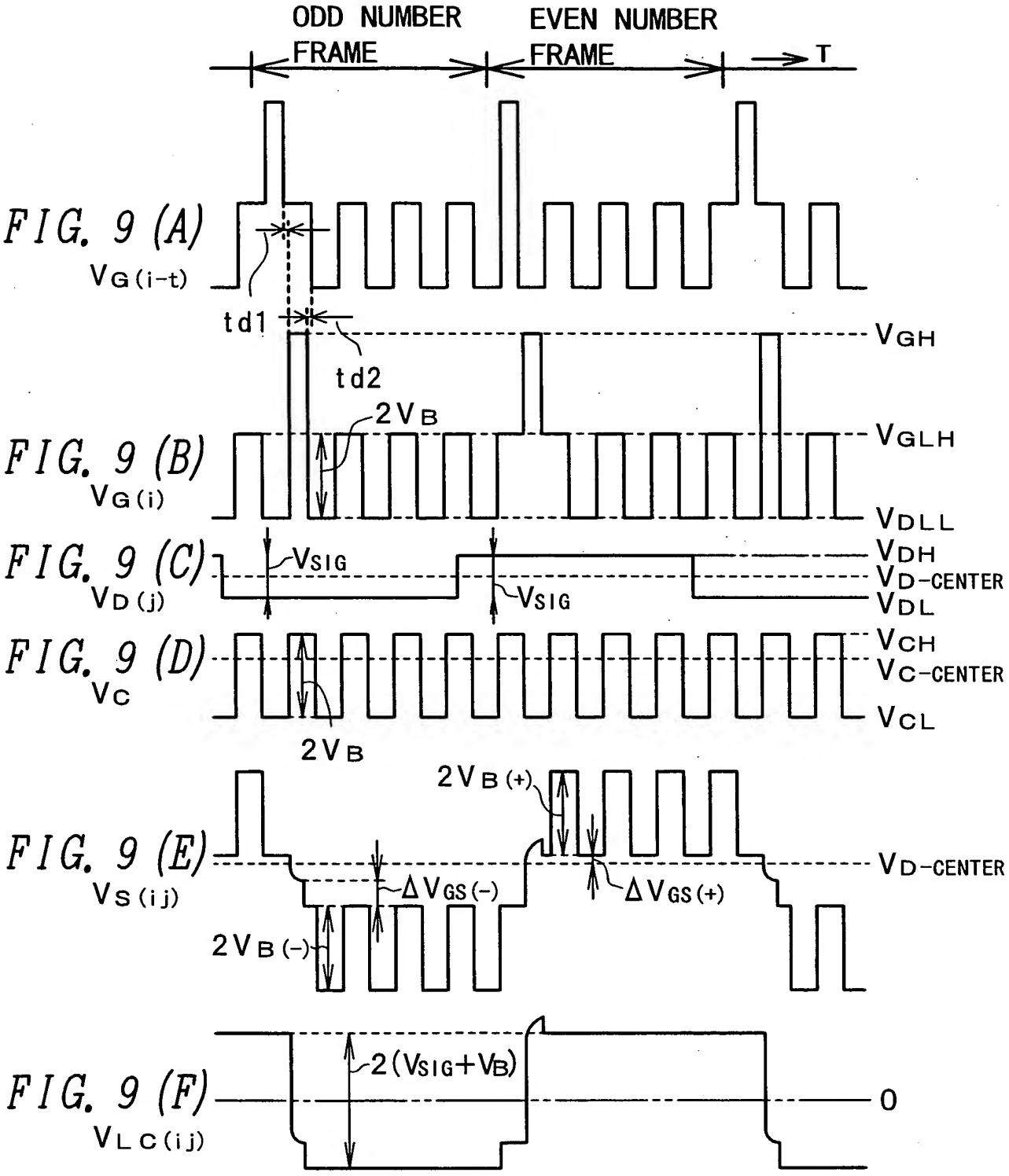

ODD NUMBER FRAME
EVEN NUMBER FRAME
T
FIG. 9 (A)
VG(i-t)
td1
td2
VGH
FIG. 9 (B)
VG(i)
2VB
VGLH
VDLL
FIG. 9 (C)
VD(j)
VSIG
VSIG
VDH
VD-CENTER
VDL
FIG. 9 (D)
VC
VCH
VC-CENTER
VCL
2VB
FIG. 9 (E)
VS(ij)
2VB(+)
VD-CENTER
ΔVGS(-)
ΔVGS(+)
2VB(-)
FIG. 9 (F)
VLC(ij)
2(VSIG+VB)
0

FIG. 10

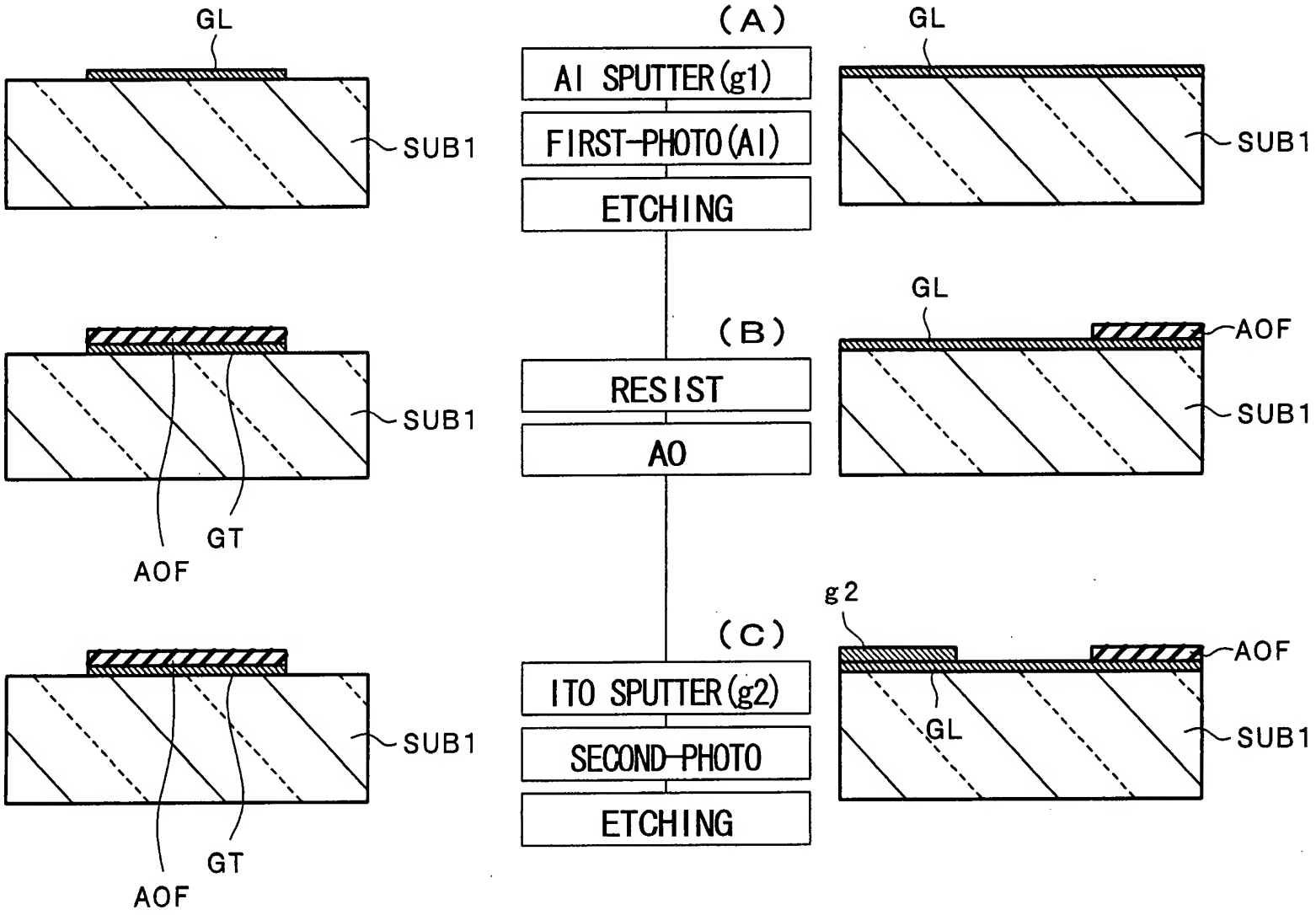

GL
SUB1
(A)
AI SPUTTER(g1)
FIRST-PHOTO(AI)
ETCHING
GL
SUB1
GL
(B)
RESIST
AO
AOF
SUB1
AOF
GT
SUB1
g2
(C)
ITO SPUTTER(g2)
SECOND-PHOTO
ETCHING
AOF
GL
SUB1
AOF
GT
SUB1

FIG. 11

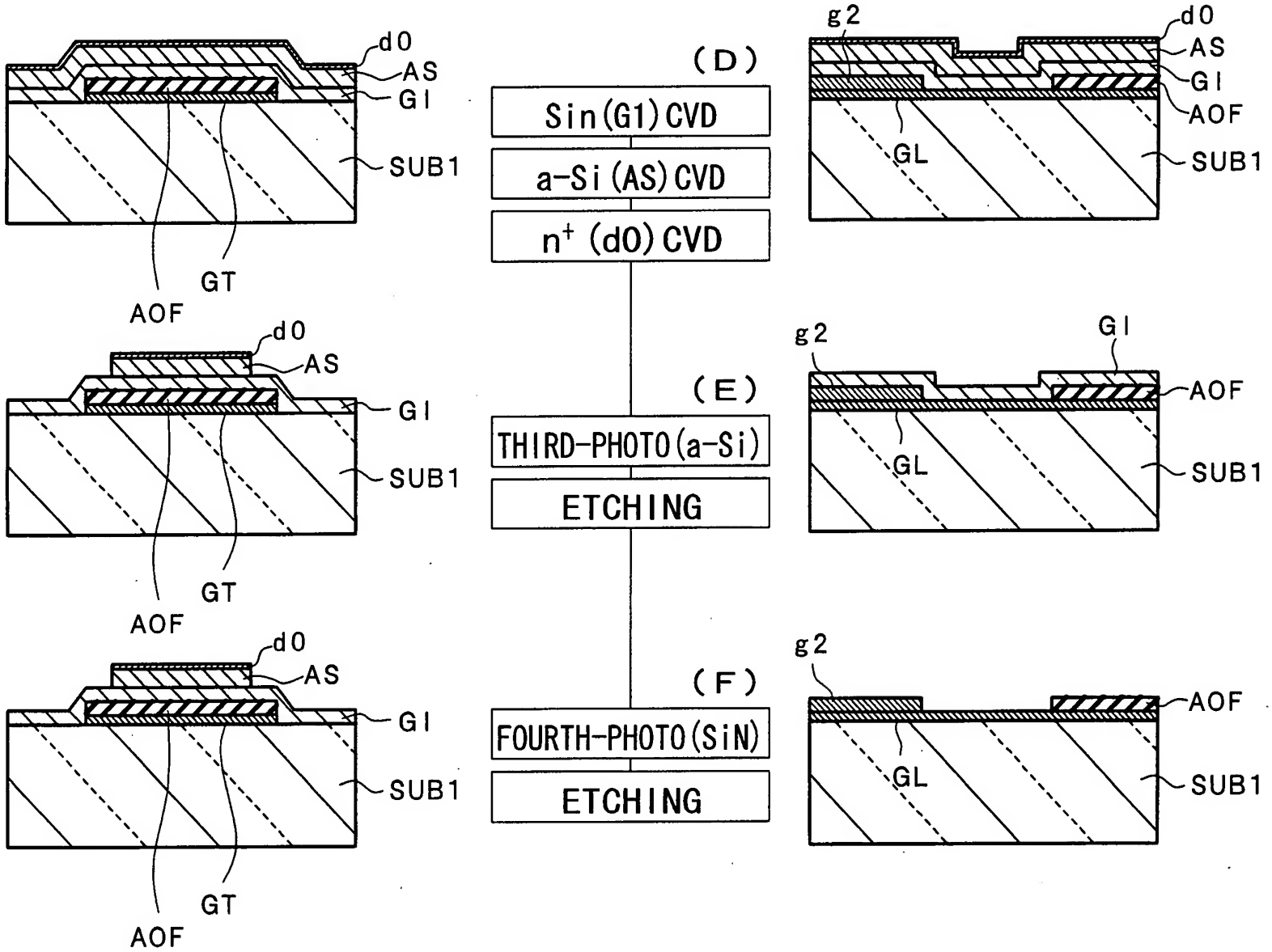

d0
AS
GI
SUB1
GT
AOF
(D)
Sin(G1)CVD
a-Si(AS)CVD
n+(d0)CVD
g2
GL
(E)
THIRD-PHOTO(a-Si)
ETCHING
(F)
FOURTH-PHOTO(SiN)
ETCHING

FIG. 12

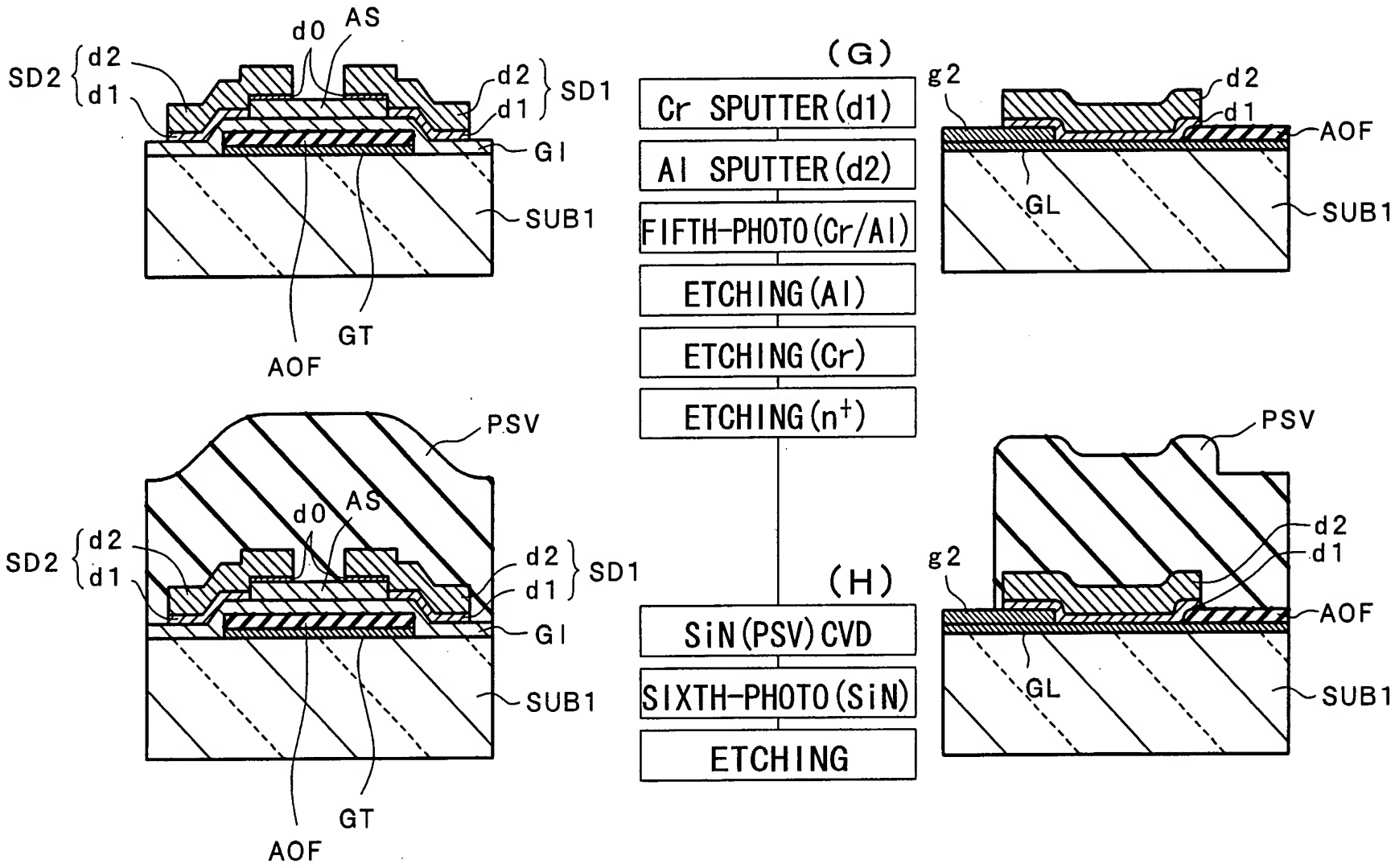

(G)
Cr SPUTTER(d1)
Al SPUTTER(d2)
FIFTH-PHOTO(Cr/Al)
ETCHING(Al)
ETCHING(Cr)
ETCHING(n+)
(H)
SiN(PSV)CVD
SIXTH-PHOTO(SiN)
ETCHING
SD2
d2
d1
d0
AS
SD1
GI
SUB1
AOF
GT
g2
GL
PSV

FIG. 13

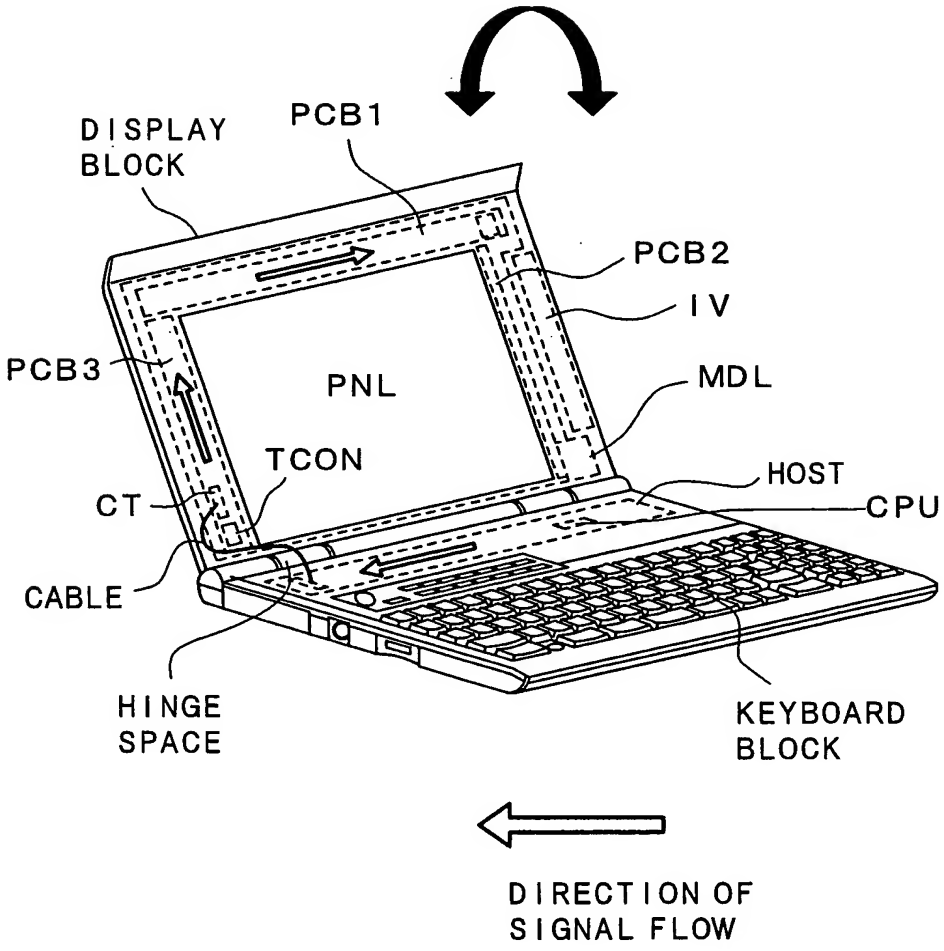

DISPLAY BLOCK
PCB1
PCB2
IV
PCB3
PNL
MDL
TCON
HOST
CT
CPU
CABLE
HINGE SPACE
KEYBOARD BLOCK
DIRECTION OF SIGNAL FLOW

Fig. 14(A)

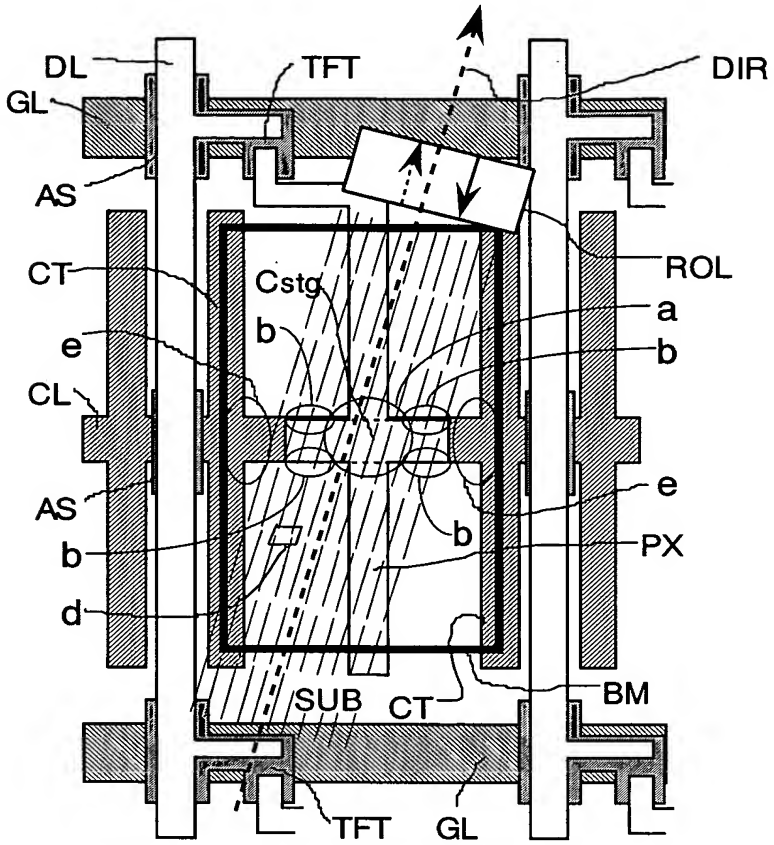


Fig. 14(B)

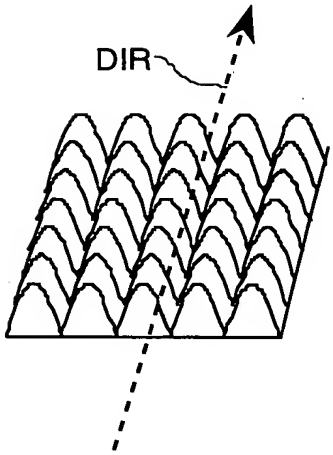


Fig. 14(C)

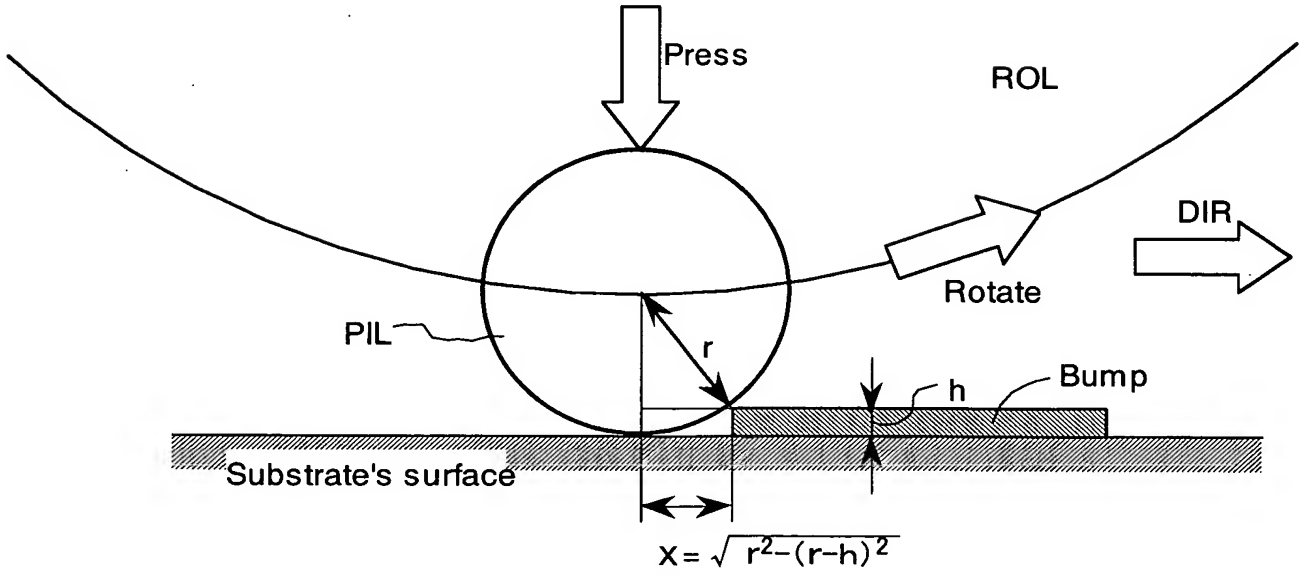


Fig. 15

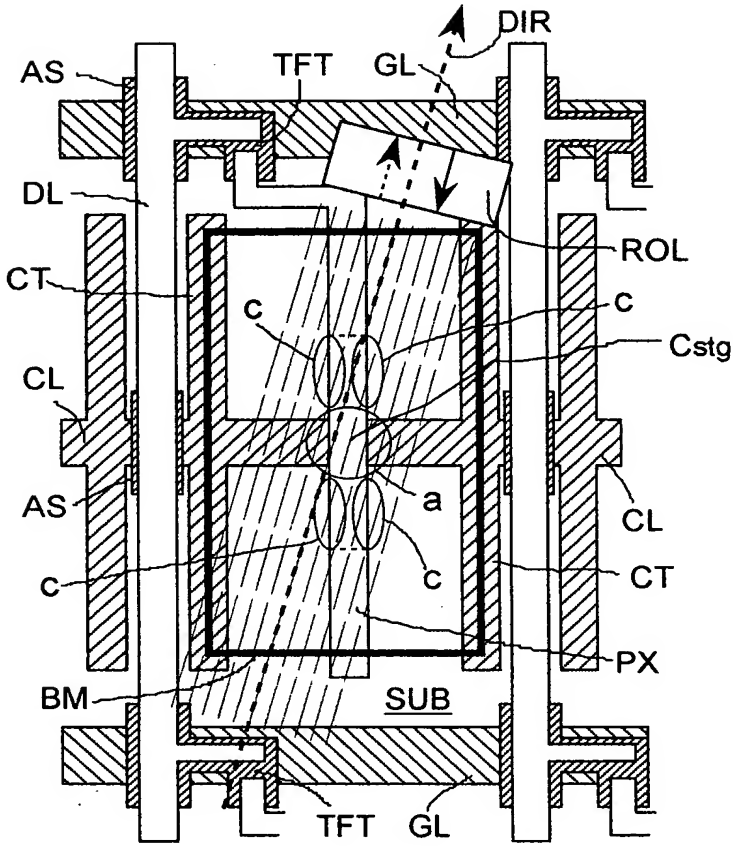


Fig. 16

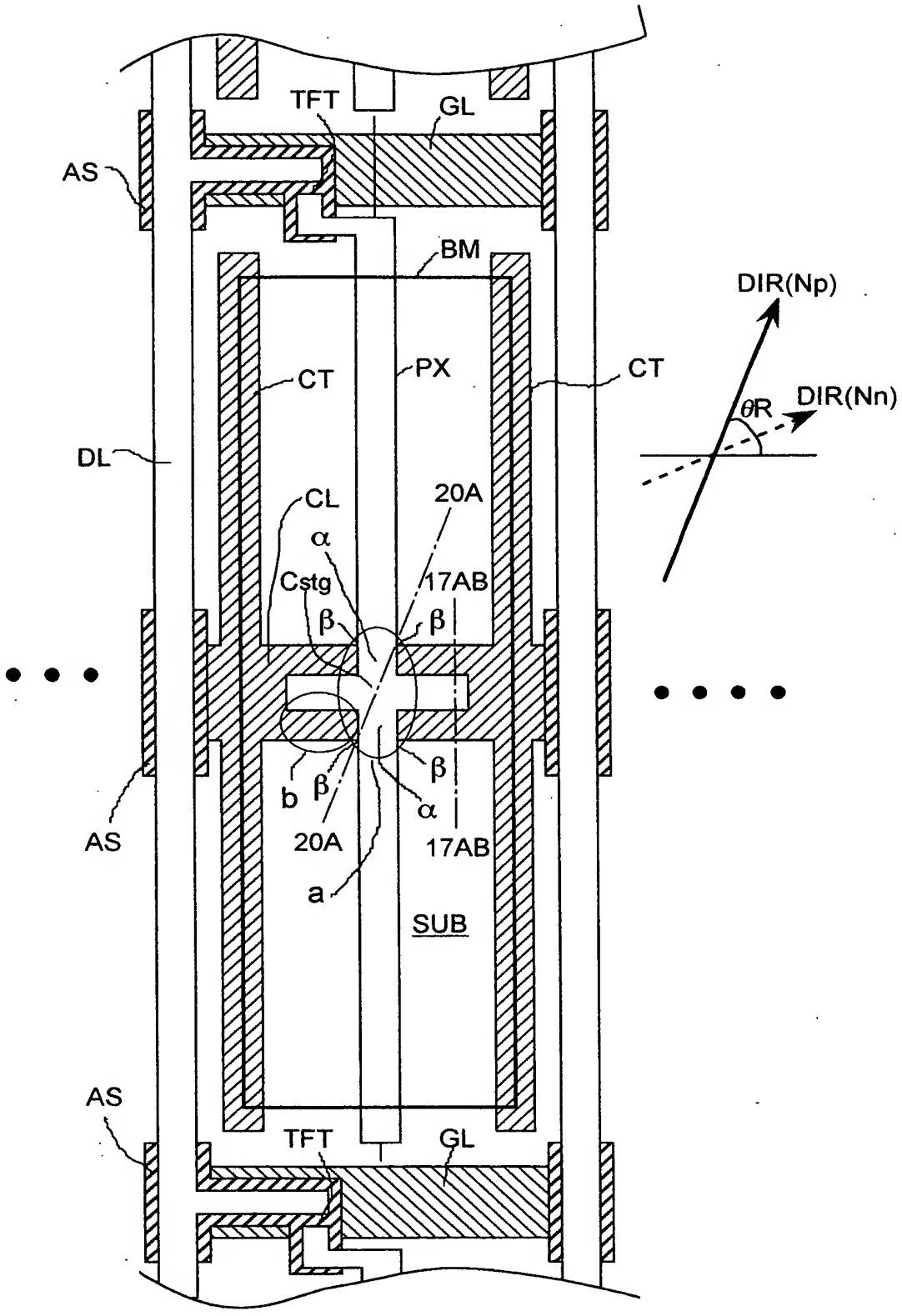

TFT
GL
AS
BM
DIR(Np)
CT
PX
CT
θR
DIR(Nn)
DL
CL
20A
α
Cstg
17AB
β
β
β
b
β
α
AS
20A
17AB
a
SUB
AS
TFT
GL

FIG. 17 (A)

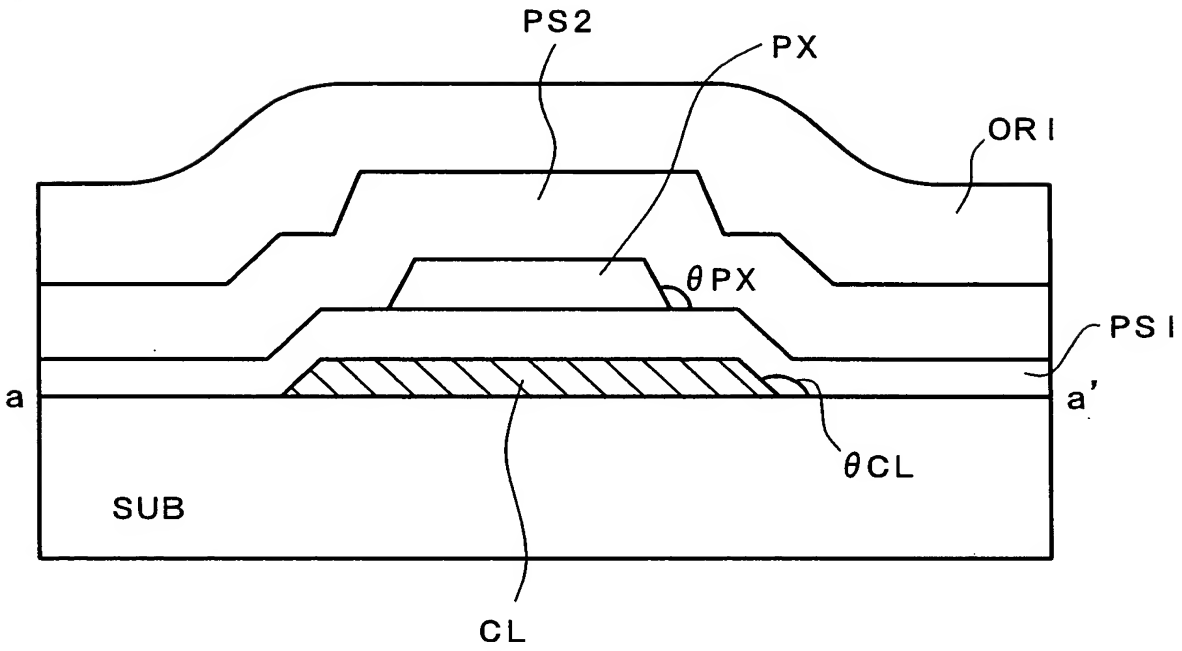


FIG. 17 (B)

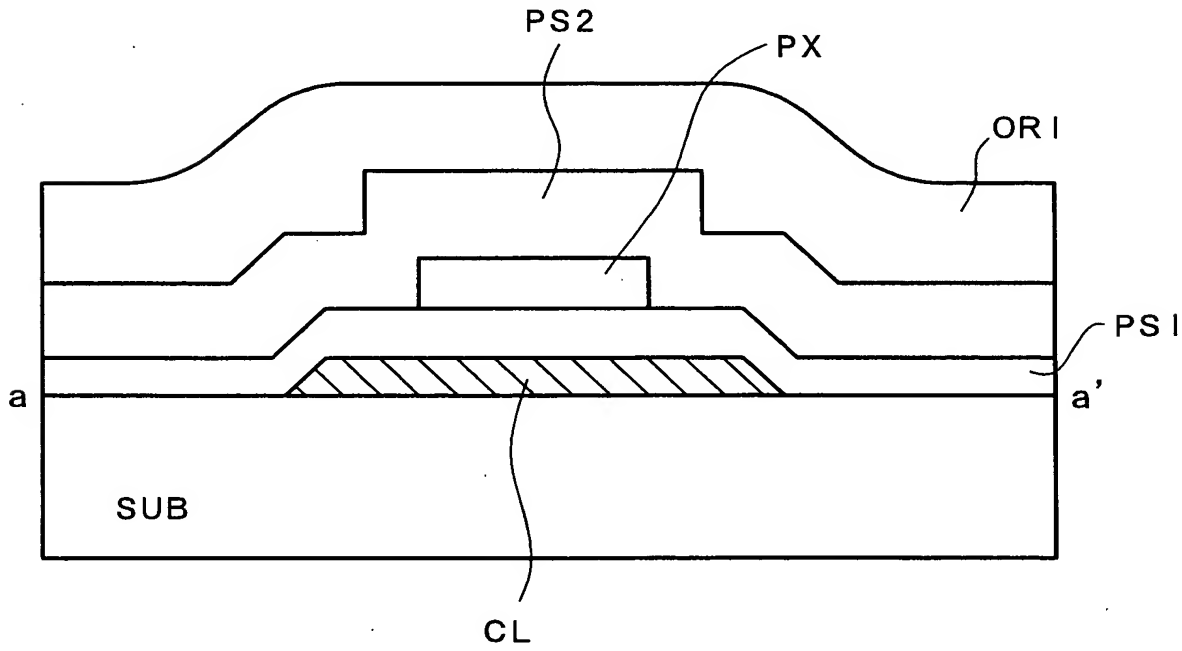


FIG. 18

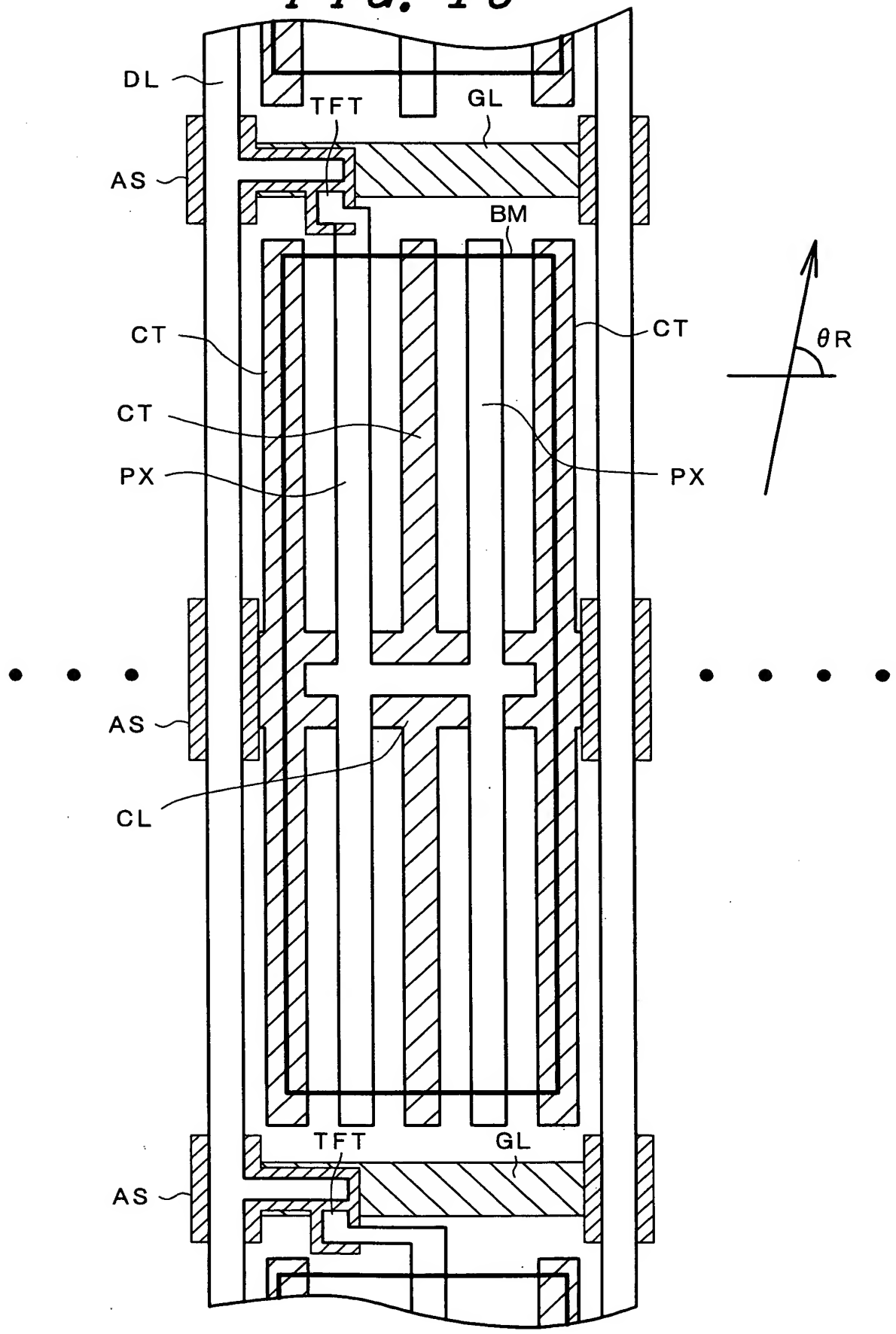


Fig. 19

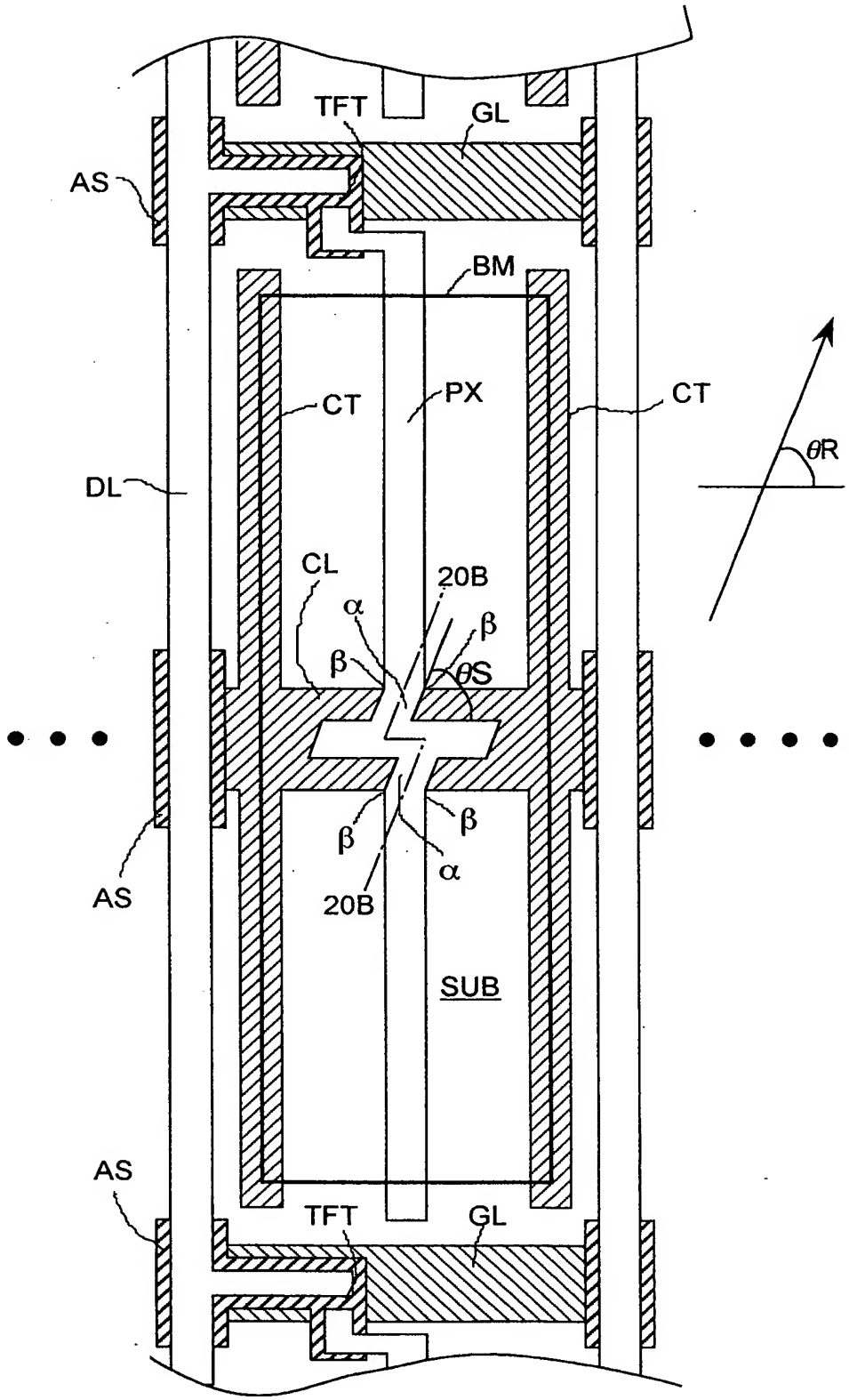


FIG. 20 (A)

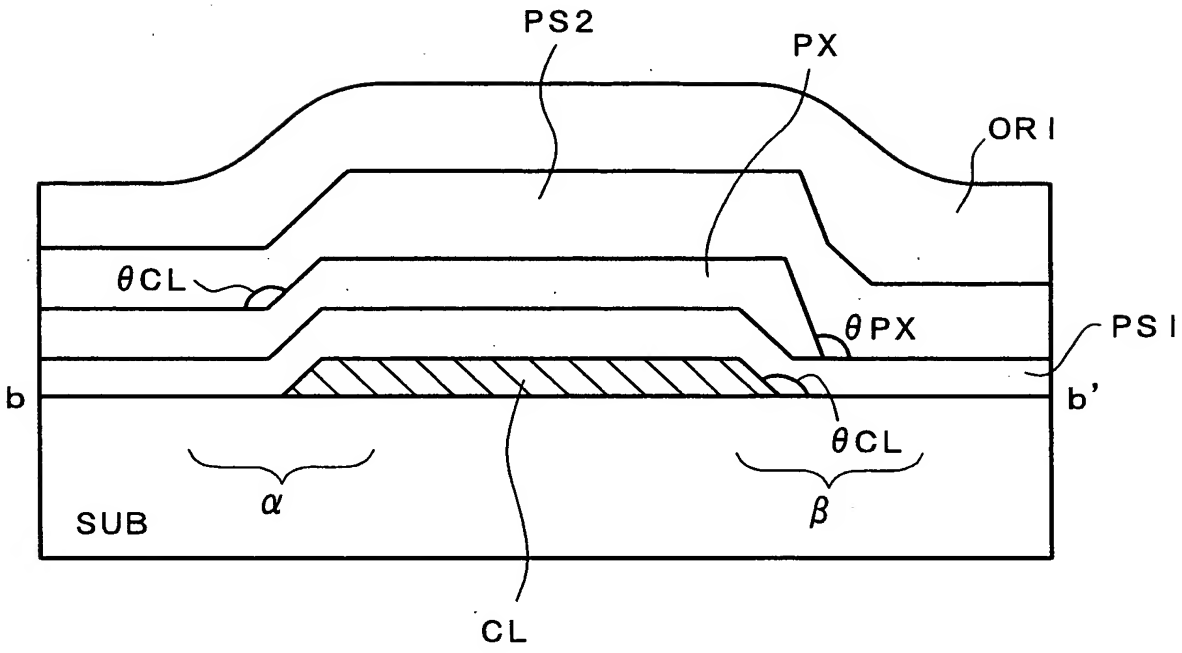


FIG. 20 (B)

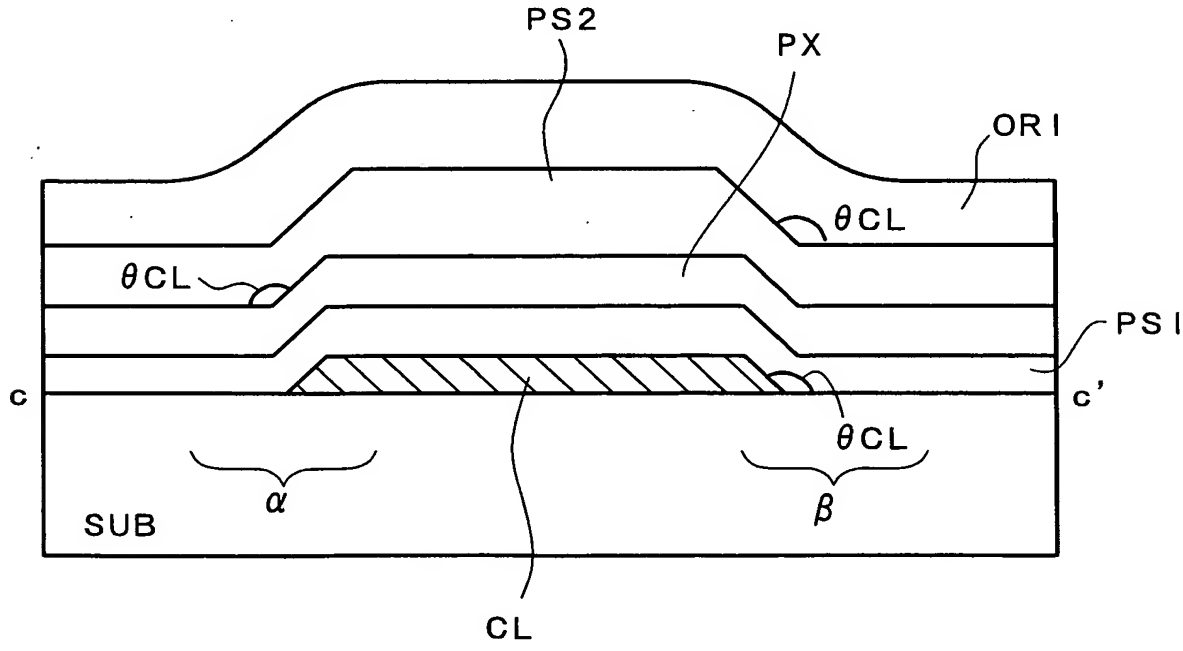


FIG. 21

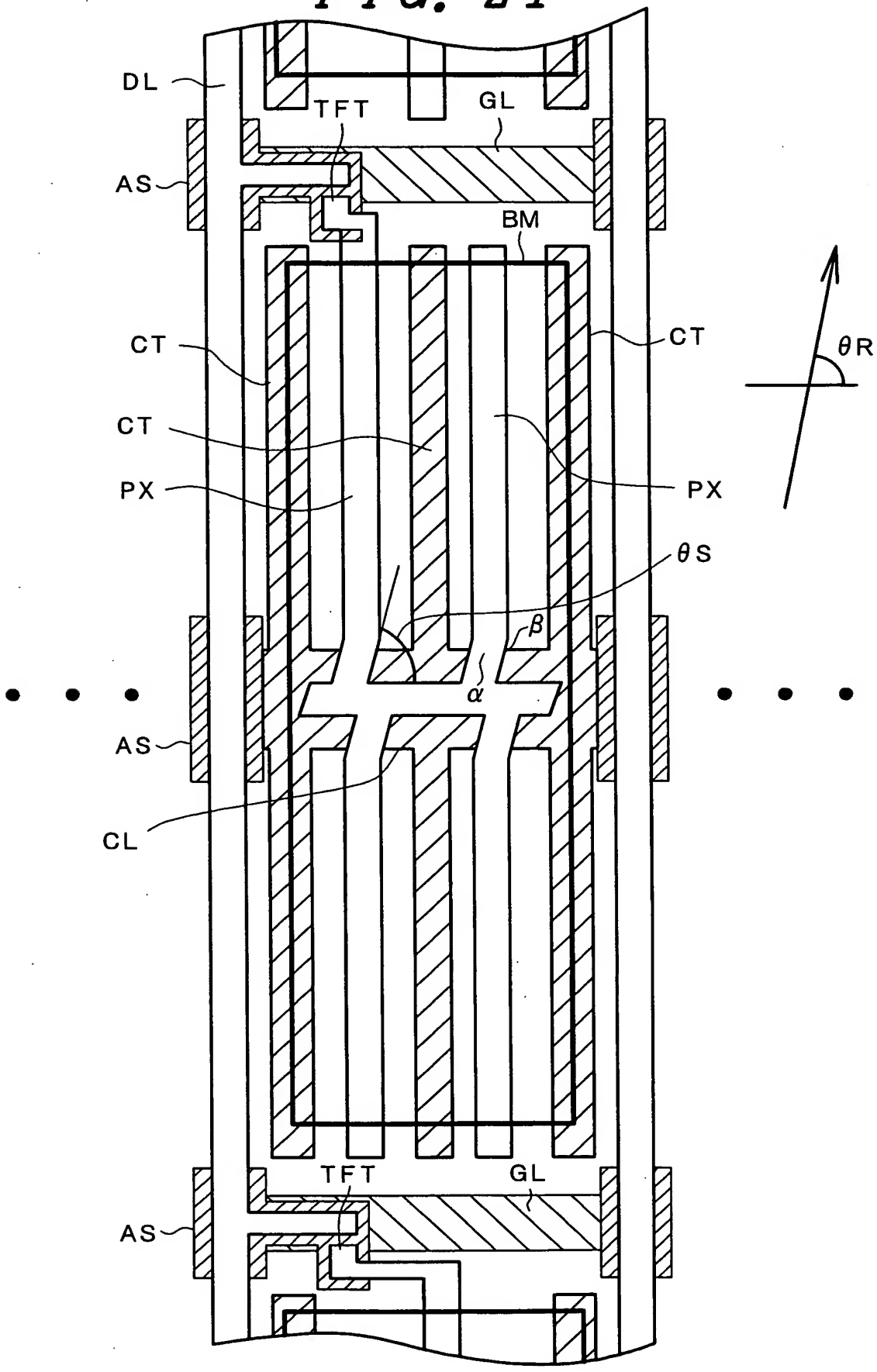


Fig.22

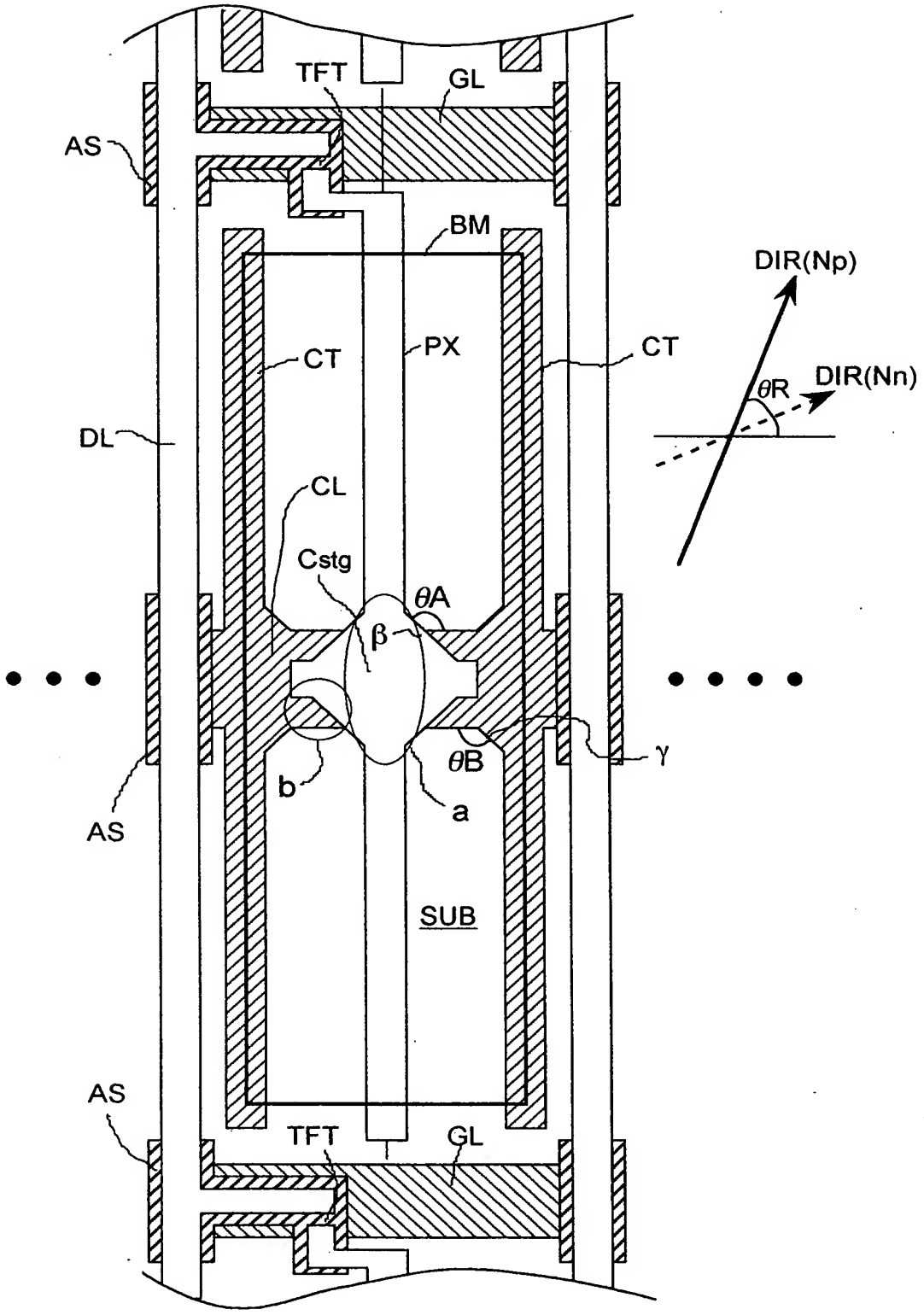

TFT
GL
AS
BM
DIR(Np)
CT
PX
CT
θR
DIR(Nn)
DL
CL
Cstg
θA
β
γ
θB
b
a
AS
SUB
AS
TFT
GL

FIG. 23

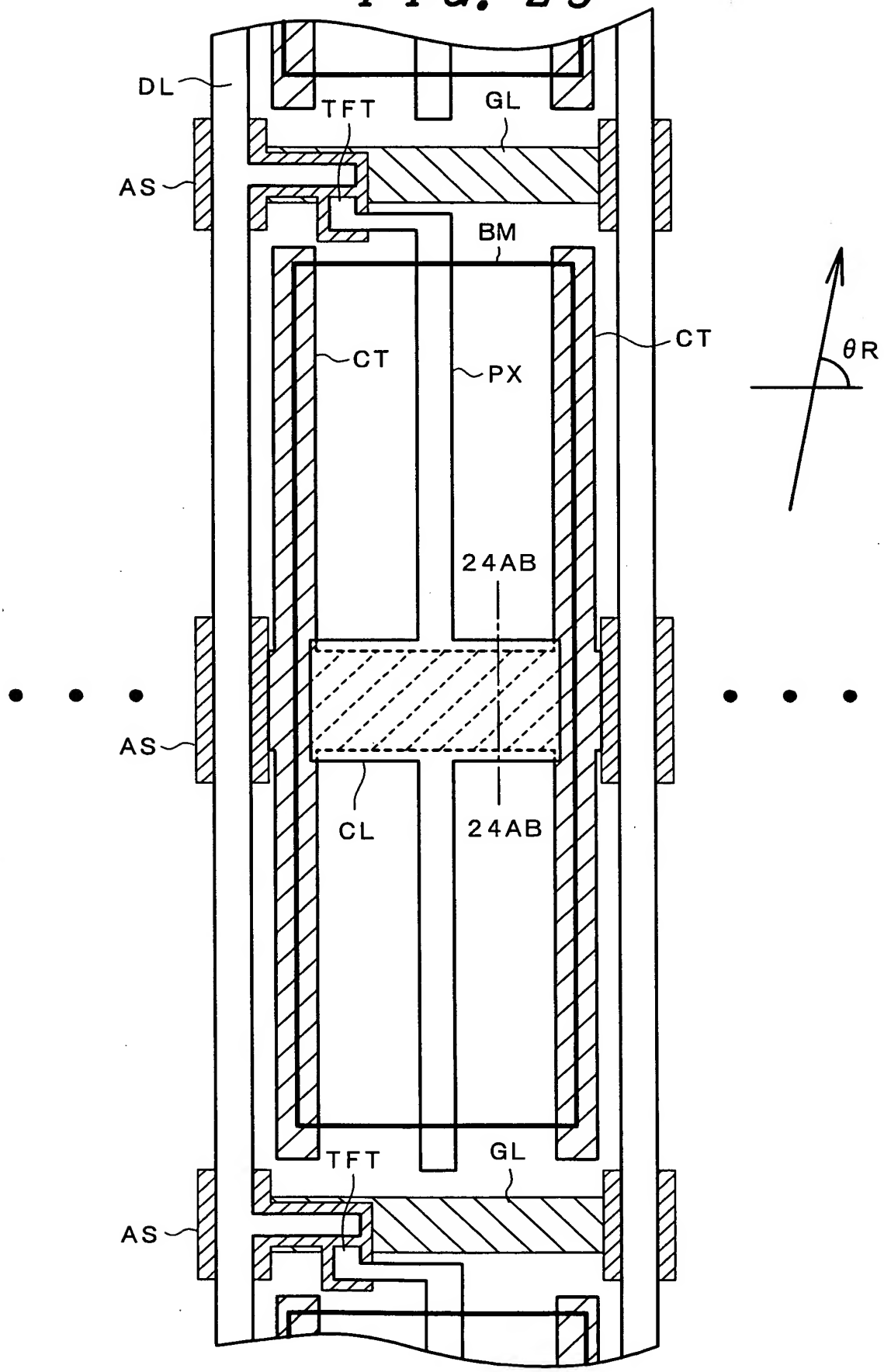


FIG. 24 (A)

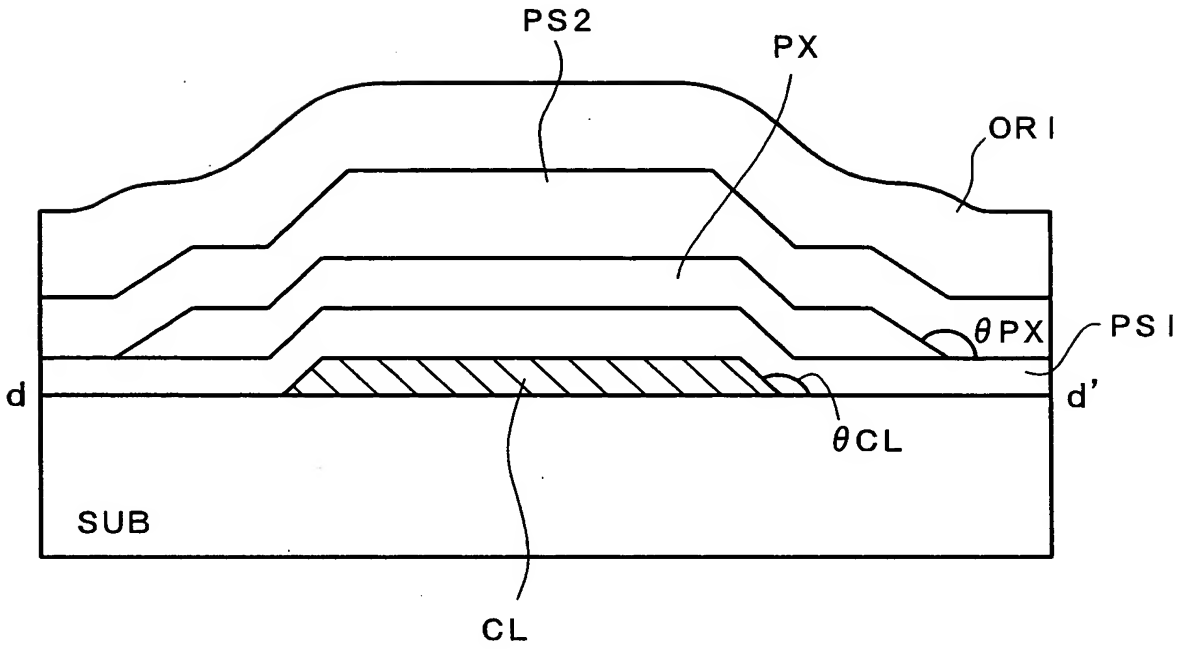


FIG. 24 (B)

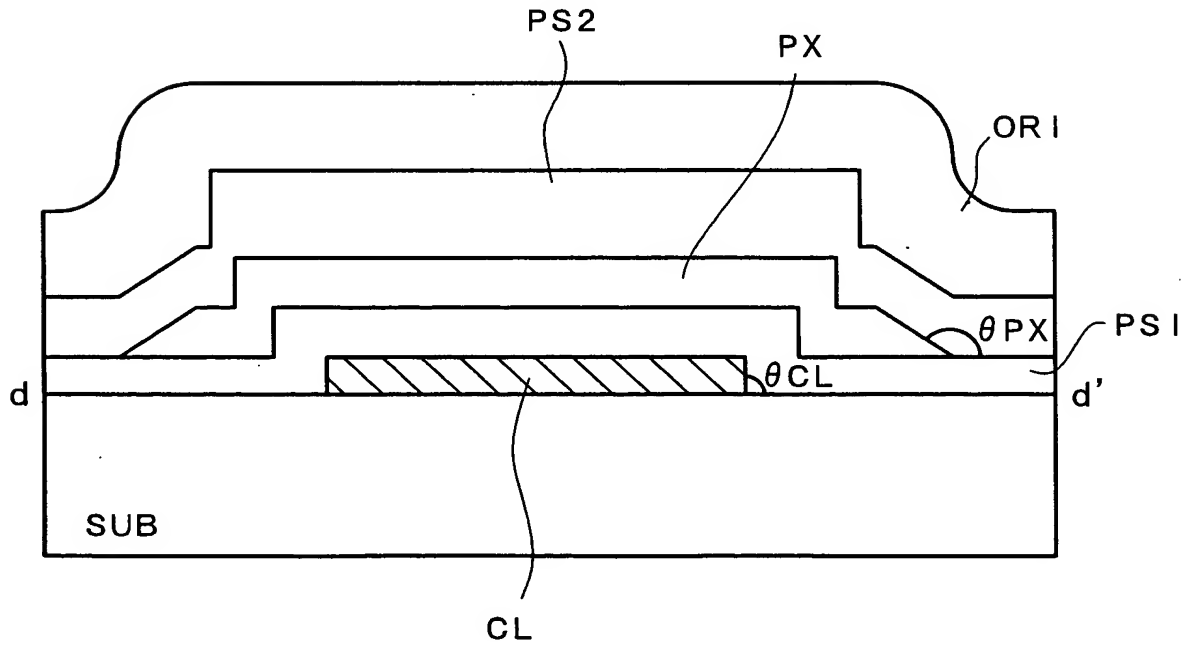


FIG. 25

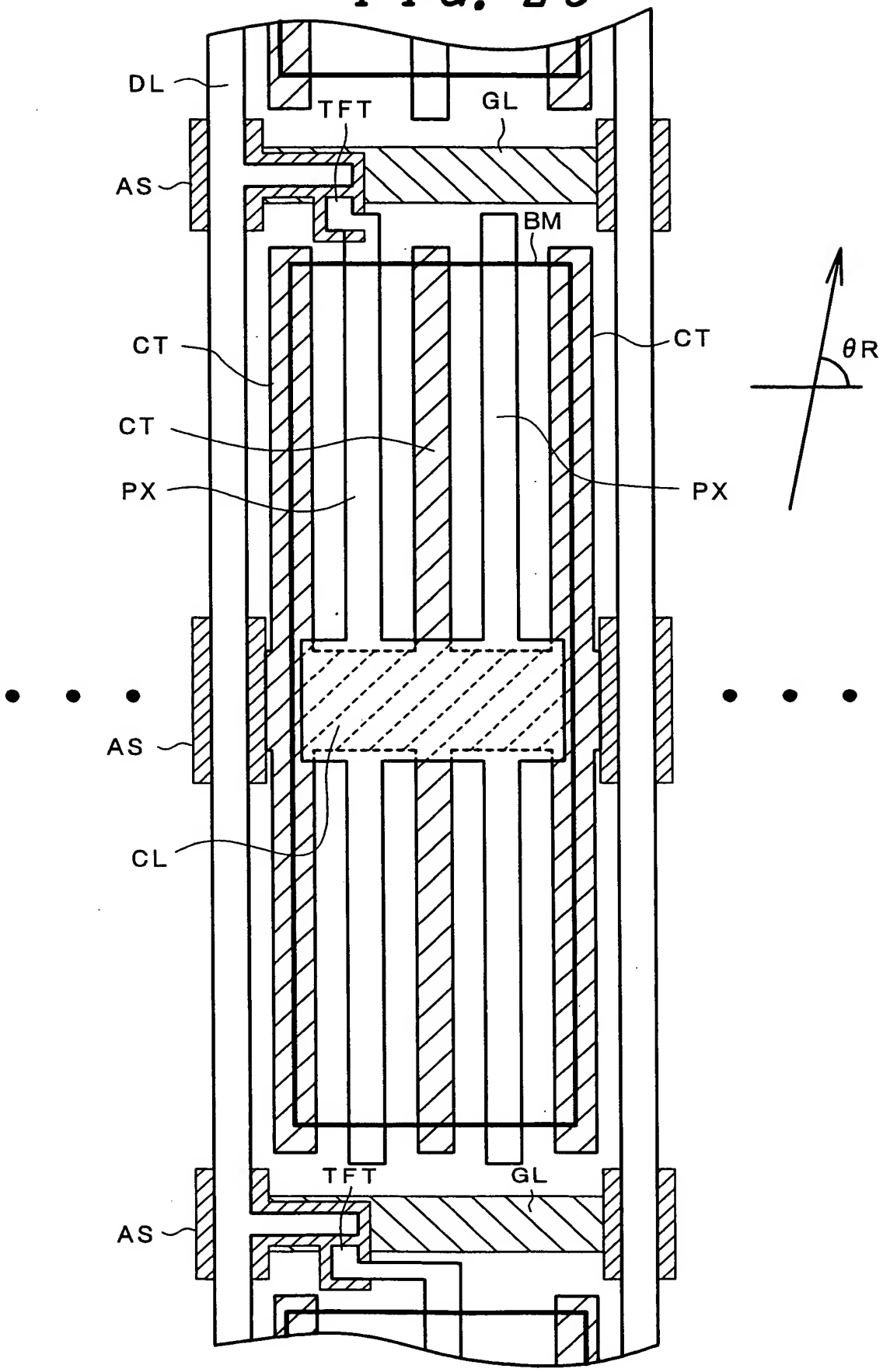


Fig. 26(A)

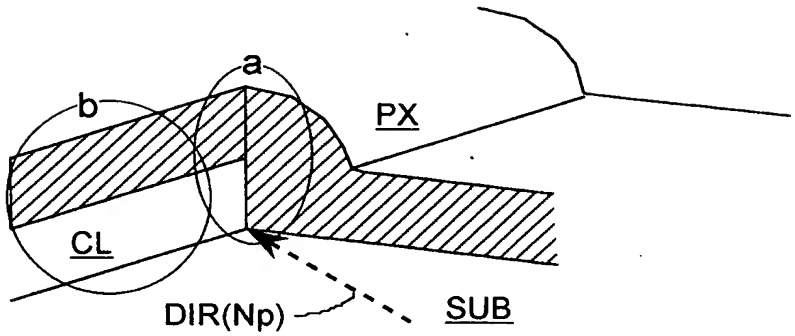


Fig. 26(B)

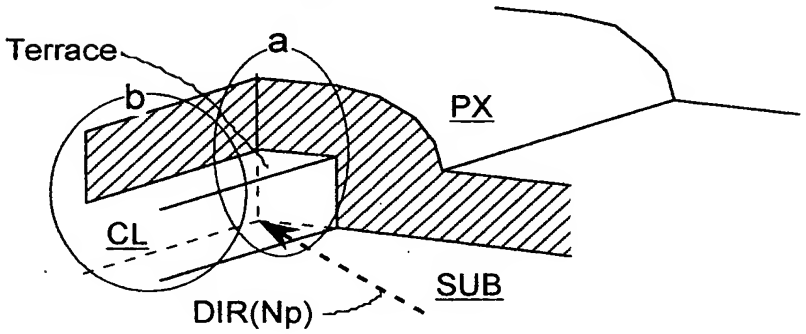


Fig. 26(C)

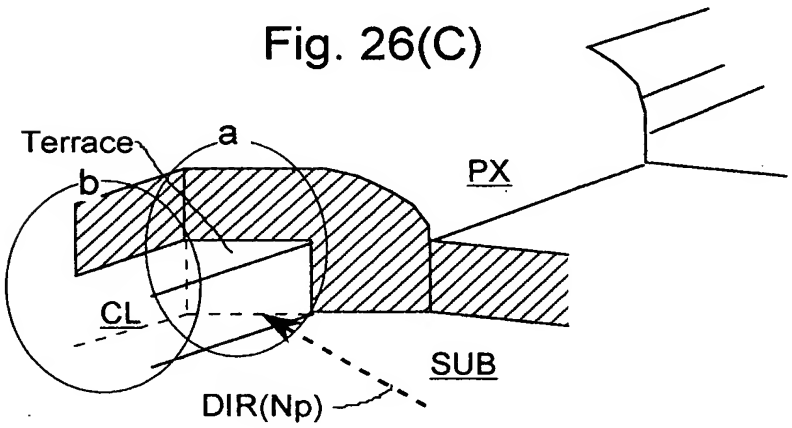


Fig. 27

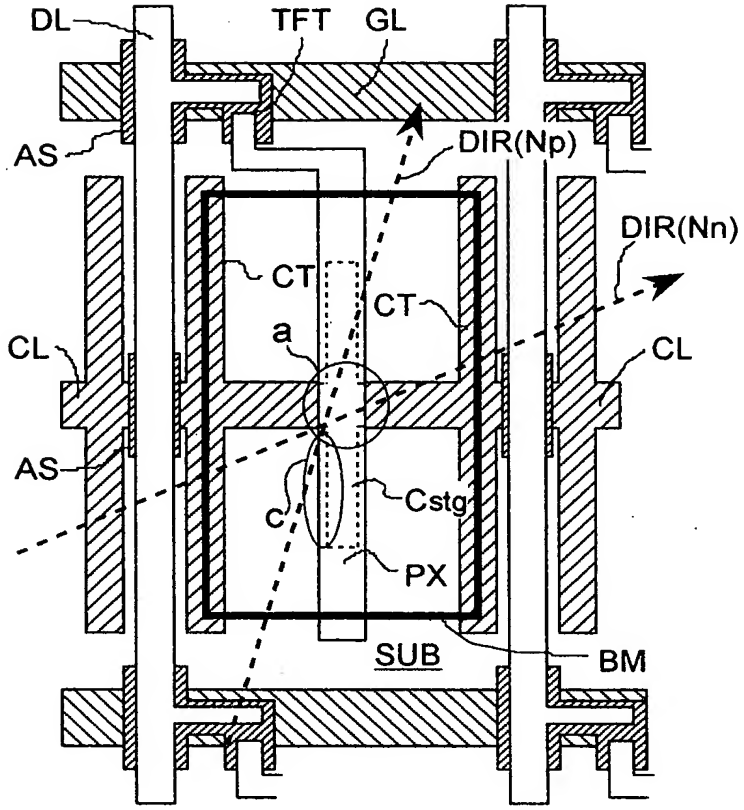

DL
TFT
GL
AS
DIR(Np)
DIR(Nn)
CT
CT
a
CL
CL
AS
C
Cstg
PX
SUB
BM

Fig. 28

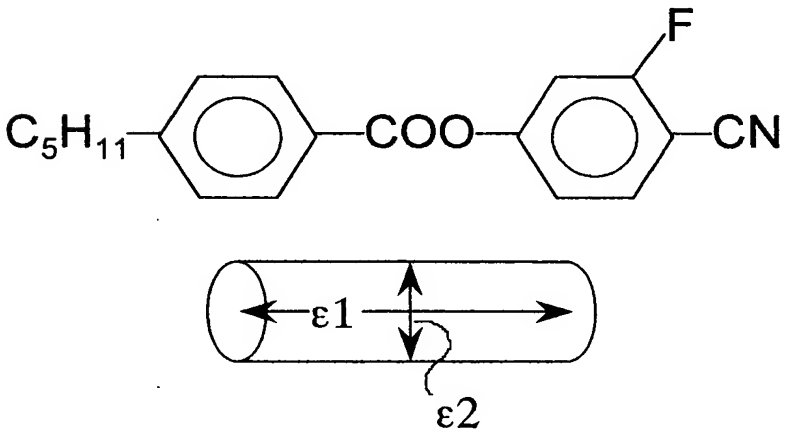

F
C_5H_{11}
COO
CN
ε1
ε2

Fig. 29(A)

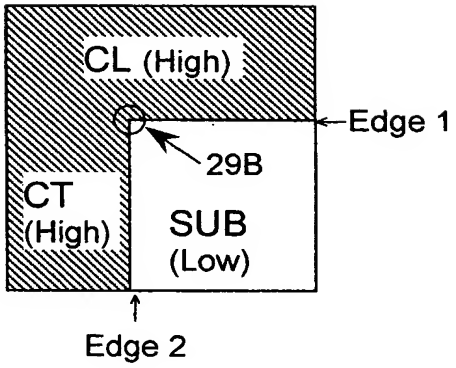


Fig. 29(B)

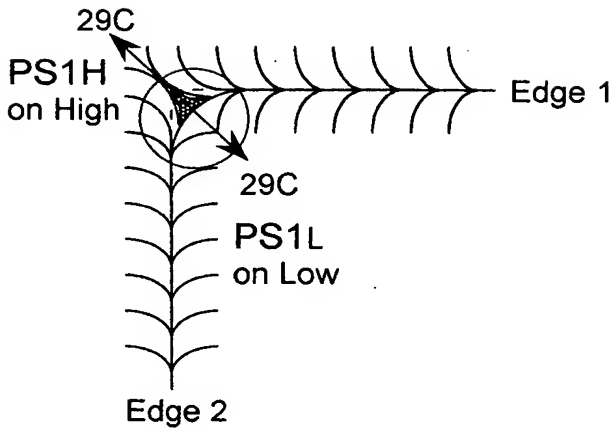


Fig. 29(C)

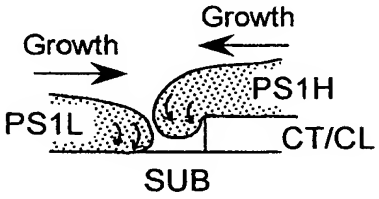


Fig. 29(D)

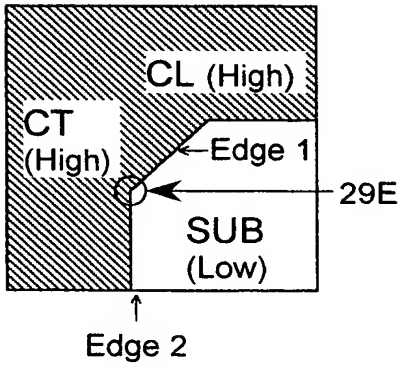


Fig. 29(E)

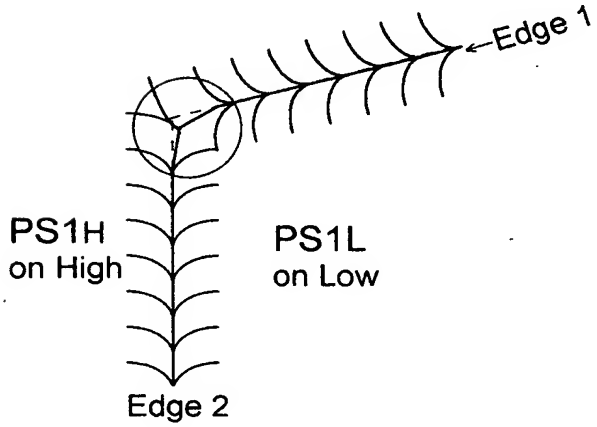


Fig. 30(A)

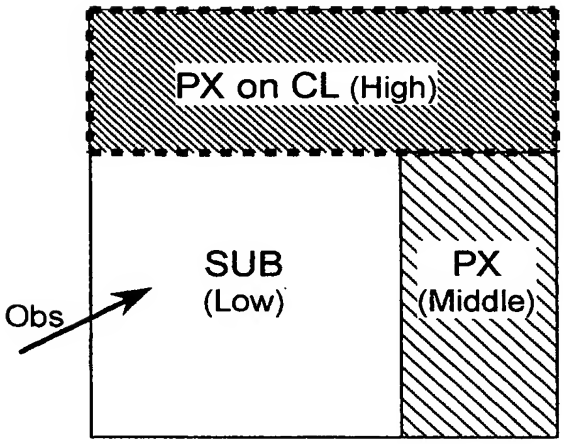


Fig. 30(B)

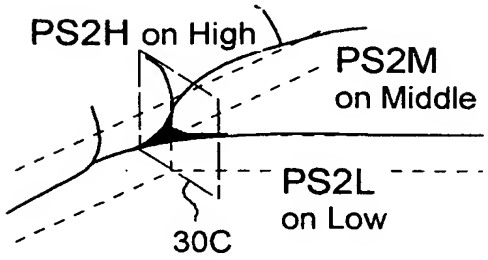


Fig. 30(C)

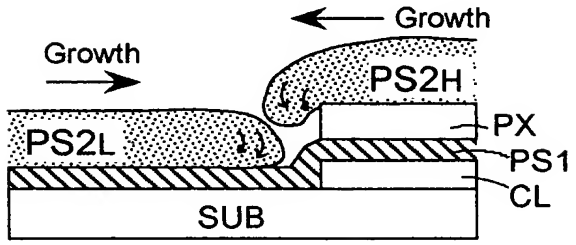


Fig. 30(D)

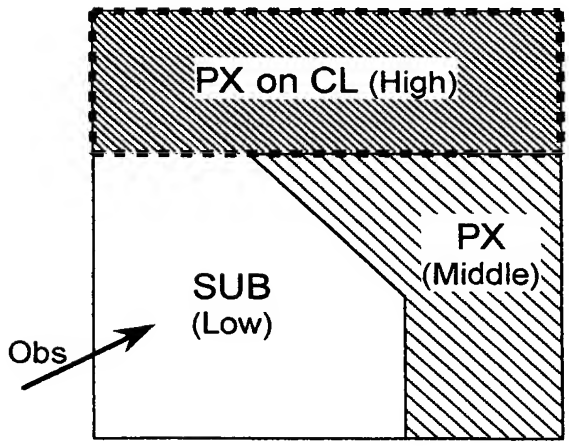


Fig. 30(E)

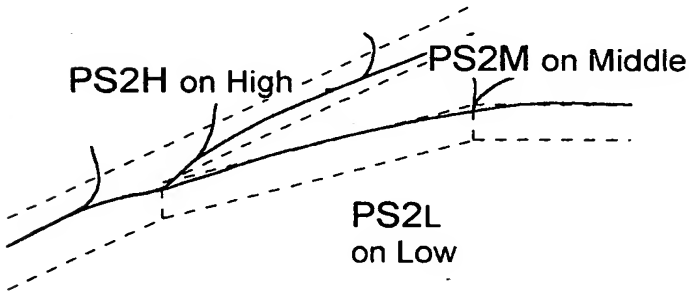


Fig. 31(A)

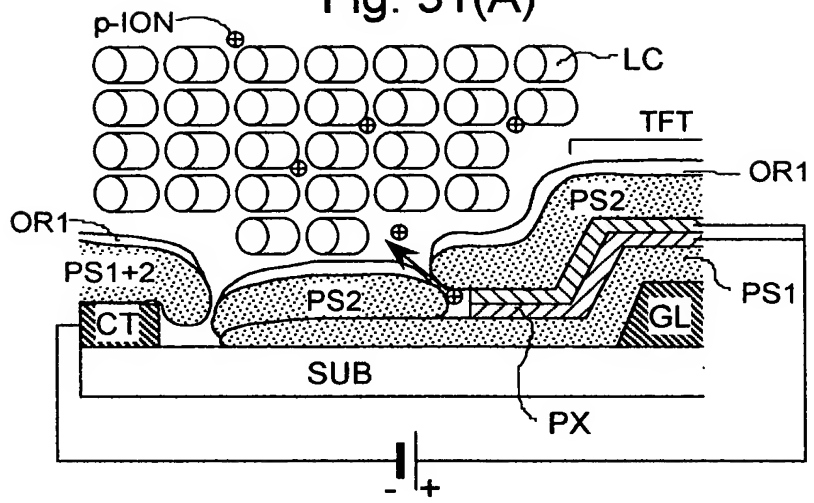


Fig. 31(B)

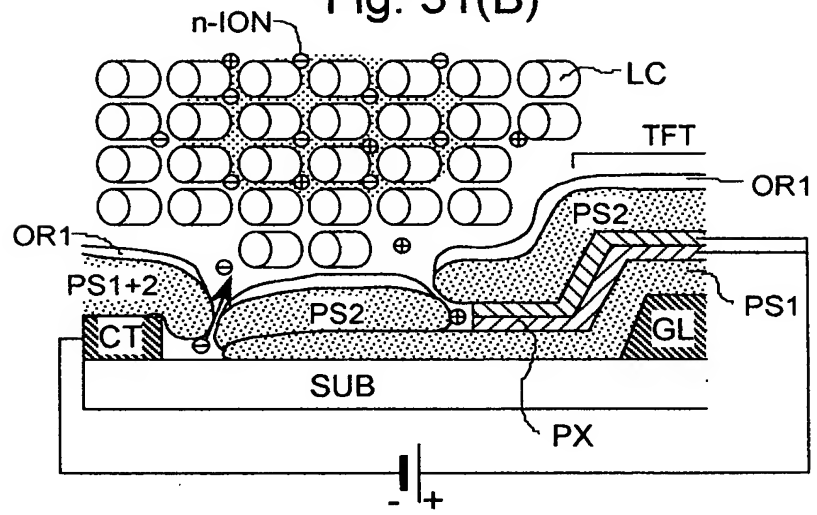


Fig. 31(C)

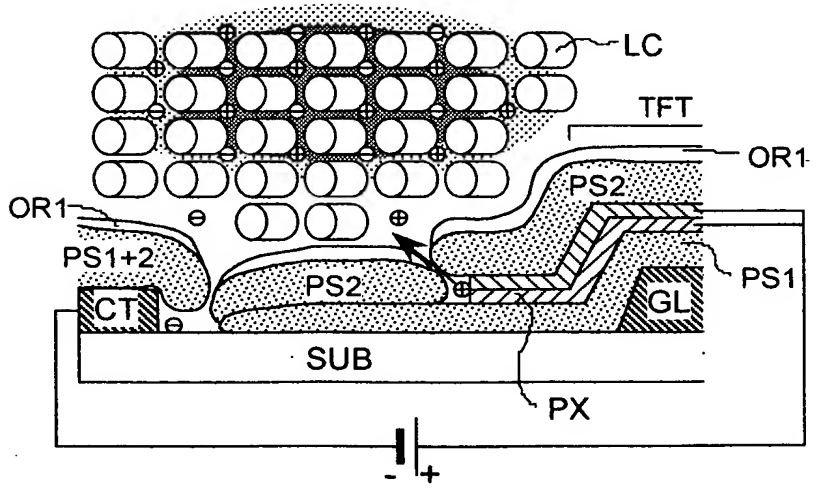


FIG. 32

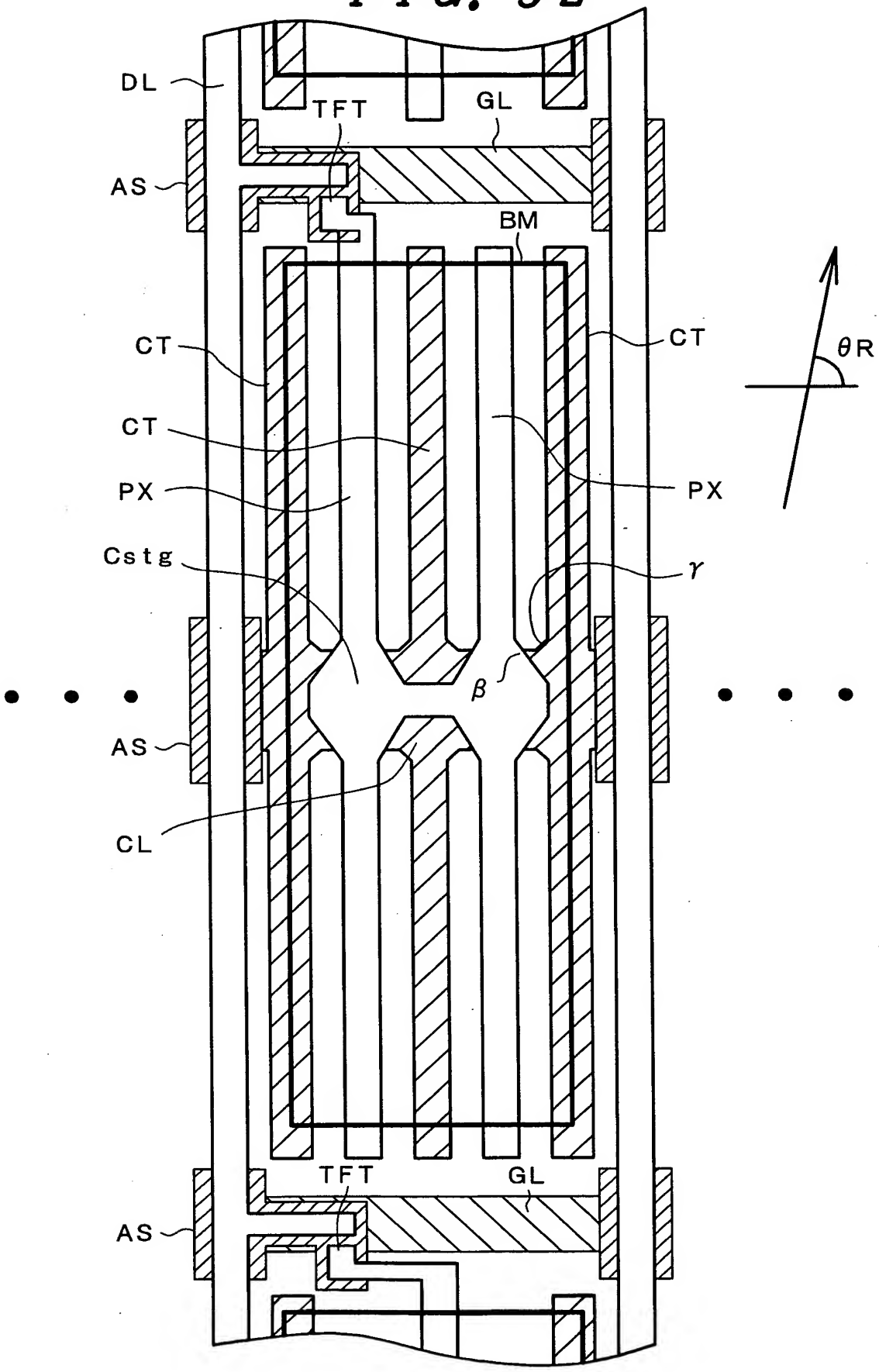


FIG. 33

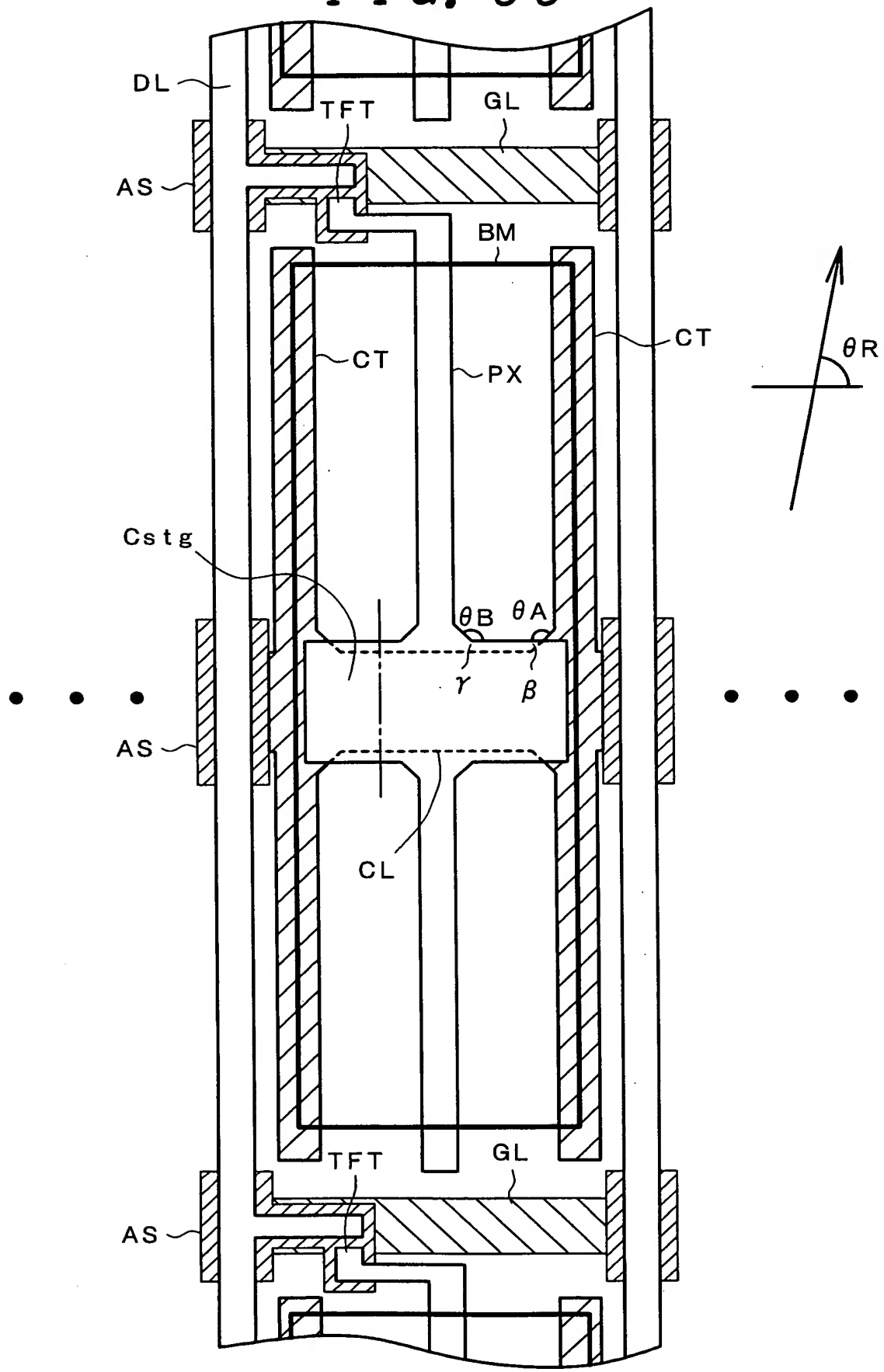


FIG. 34

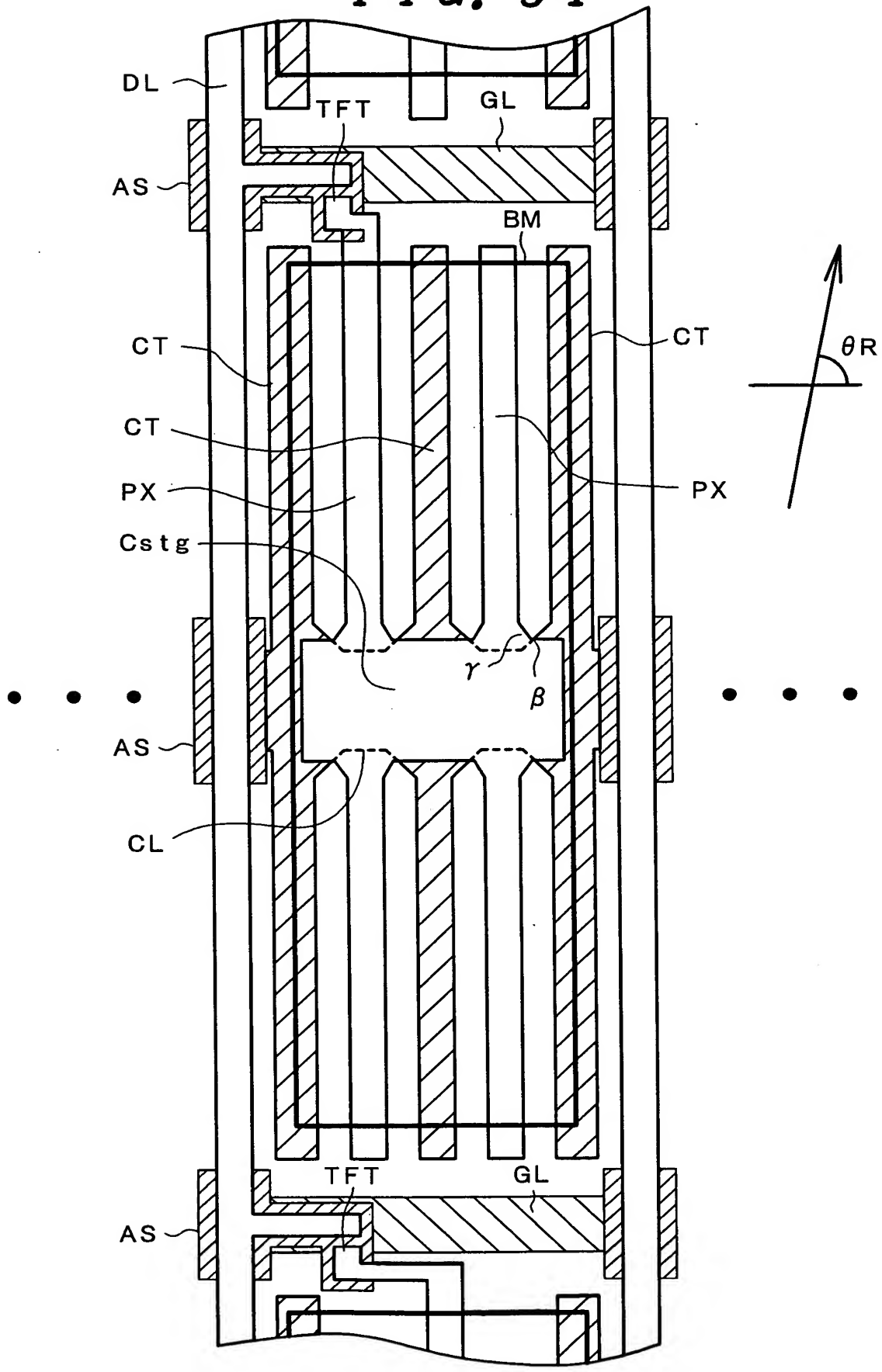


Fig. 35(A)

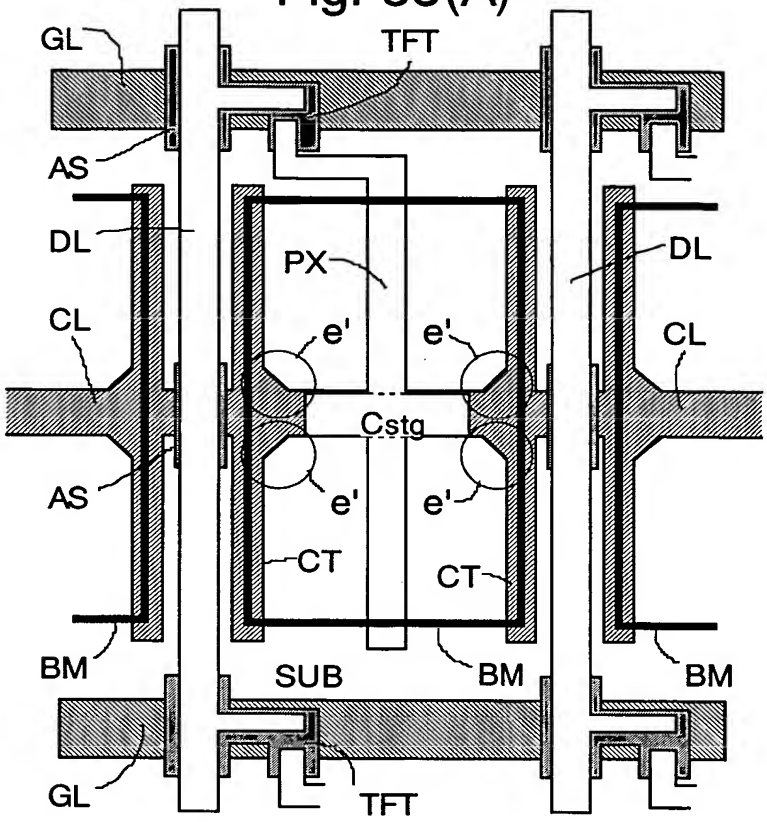


Fig. 35(B)

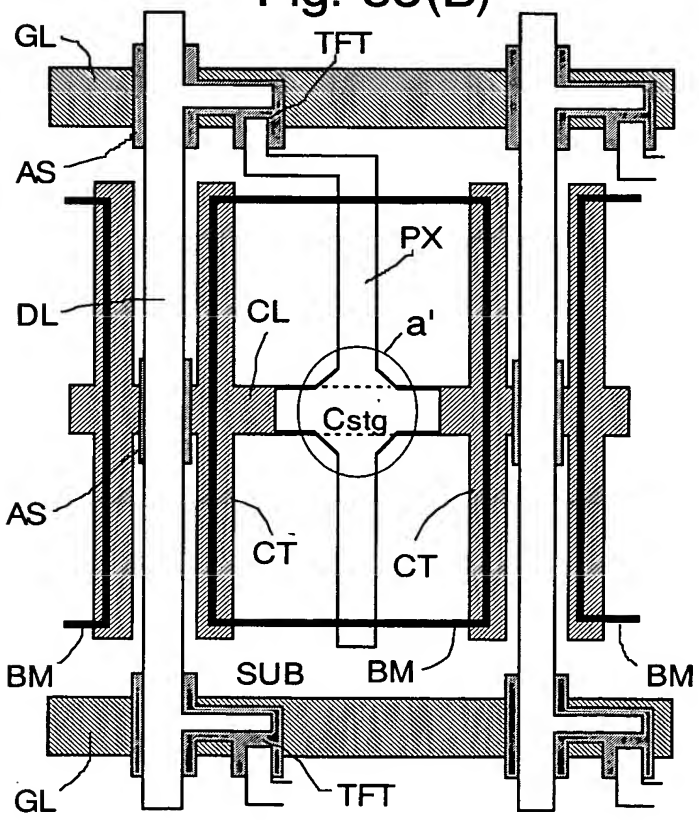


Fig. 36(A)

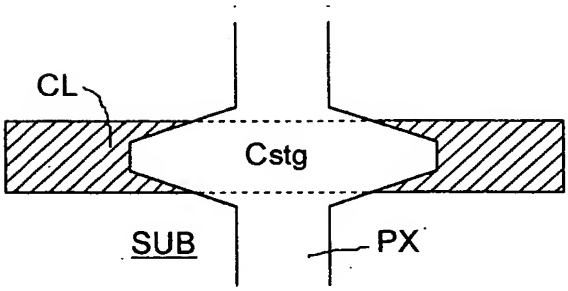


Fig. 36(B)

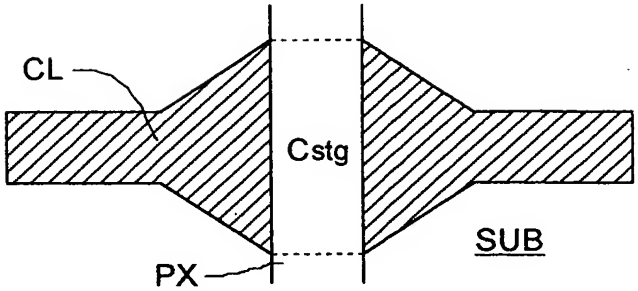


Fig. 37

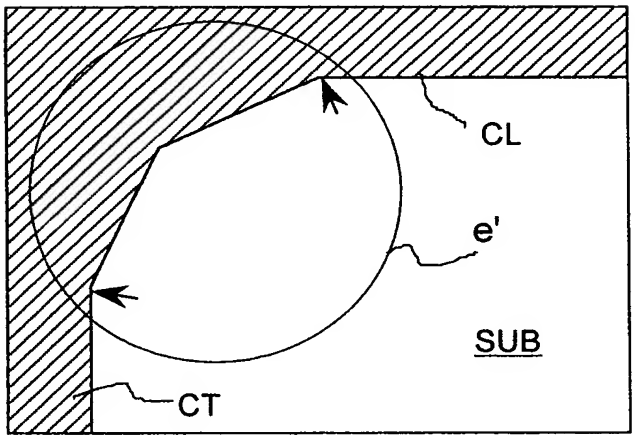


Fig. 38(A)

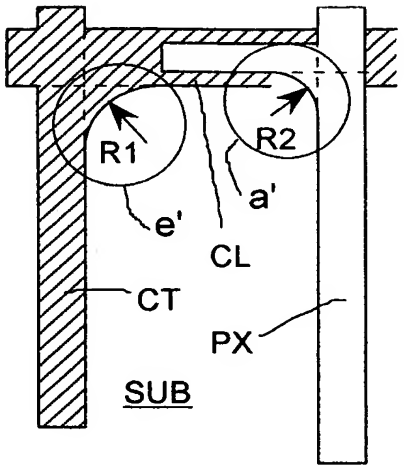


Fig. 38(B)

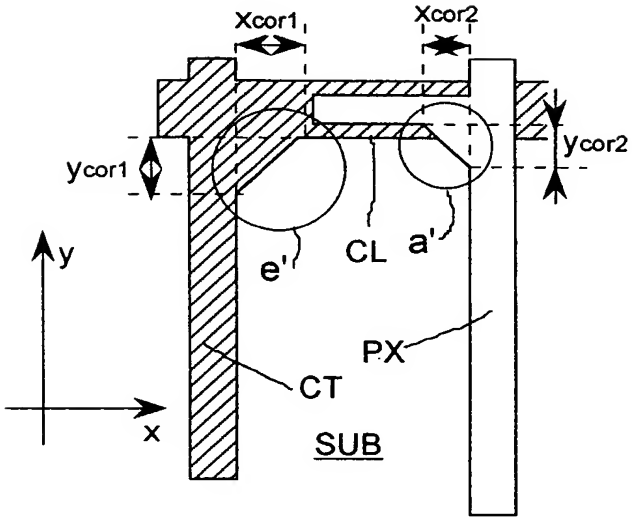


Fig. 39

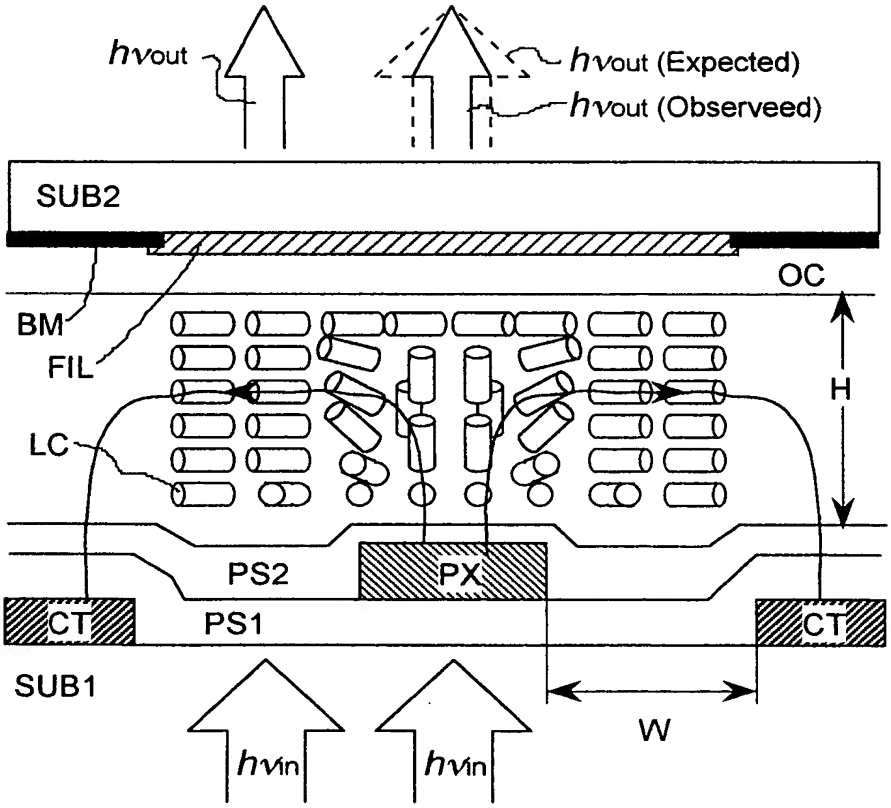


Fig. 40(A)

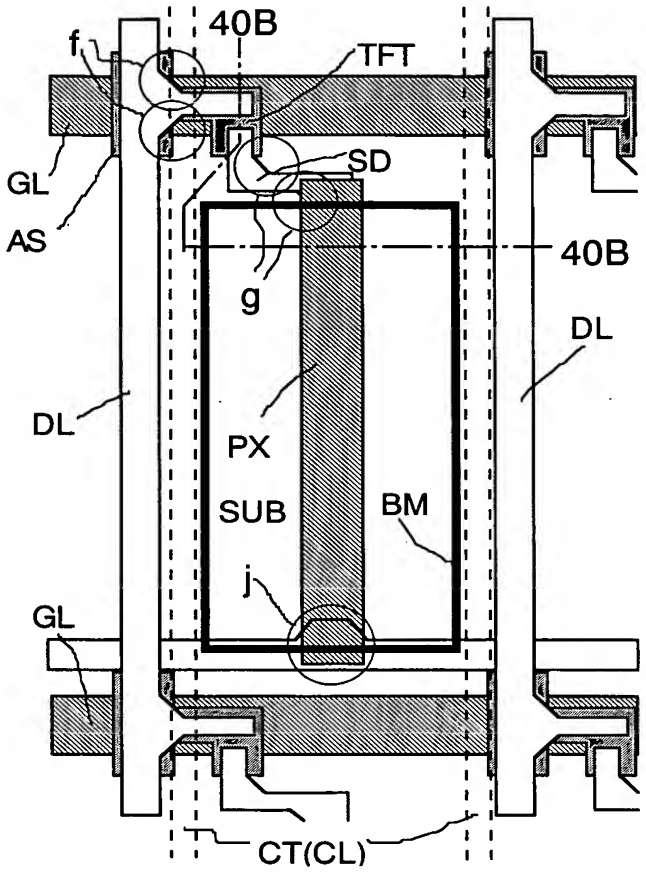
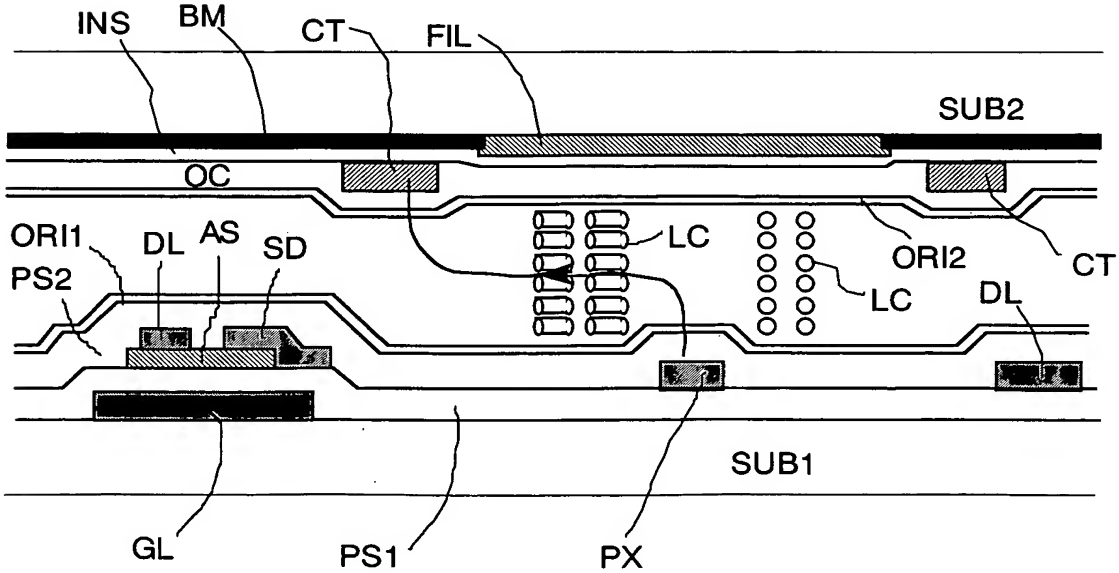



Fig. 40(B)